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October Spooktacular 2017

Mastering a monster – *p.16*

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2017 AMPS ARMOR GALLERY p.42

Bill Plunk's 1/48 scale P-61 Black Widow – p.20

Parts prep made easy *p.40*

Adding details to a giant tank *p.48*

Updating a *Space: 1999* Eagle *p.36*

+ OUR EXPERTS BUILD & REVIEW 8 NEW KITS

Rye Field 1/35 scale M1 Assault Breacher Vehicle – p.58

Academy 1/72 scale F-15E Strike Eagle – p.56

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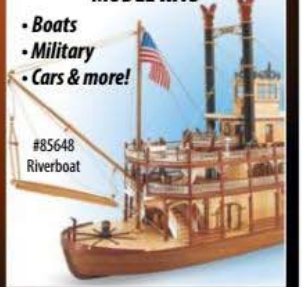

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P30380

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Peter Alway's *Rockets of the World* has been out of print for some time, but we can still supply the following related items:

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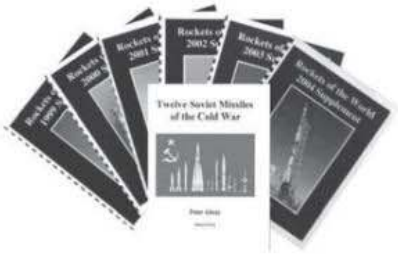

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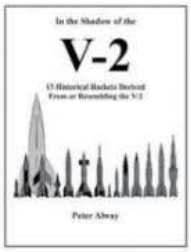

- *Fourteen US Army Missiles of the Cold War*: Companion to Twelve Soviet Missiles, it covers the Dart, Corporal, Hawk, Honest John, Nike Ajax, Jupiter and eight more!
- *In the Shadow of the V-2* covers the development versions (A-4, A-5), wartime variants (Wasserfall), post-war derivations and research programs in the US and USSR. Fifteen rockets in total

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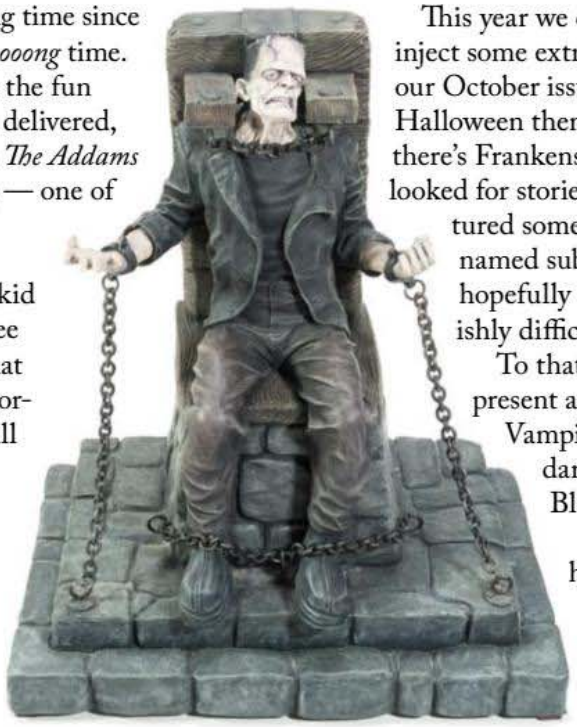
By Mark Savage

They're creepy and they're kooky...



It has been a long time since I was a kid. A *loooong* time. But I remember the fun that Halloween delivered, especially when *The Addams Family* came on — one of my favorite TV shows.

While every kid can enjoy the free candy and all that goes with trick-or-treating, the chill that creepy Halloween characters put into the season makes it exciting and fun. But humor also plays a big role in making any season, holiday, or event more enjoyable.

Voilà, we bring you Spooktacular 2017.

This year we decided to inject some extra fun into our October issue with a Halloween theme. Certainly there's Frankenstein, but we looked for stories that featured some devilishly named subjects, but hopefully not devilishly difficult builds.

To that effect, we present a Demon, a Vampire, and a dark, menacing Black Widow.

We may have stretched the spooky theme a bit with an airbrushing column featuring menacing nose art on an M48, plus Crazy King Ludwig's ornate castle set in the dark forests of Germany — although Karl Logan built the castle with a touch of romance, instead of mischief, in his heart.

Still, I can imagine bats flying around one of the towers and a damp, creepy dungeon beneath. Did I just hear some chains being dragged across the floor?

We know our Spooktacular is a bit off the wall. But we hope you enjoy our foray into the frightful and dark world of Halloween, even if only in name for most of our builds. I think you'll find there are still a lot of good modeling tips in all the stories.

Spooktacular 2017 is all in good fun — and isn't that what modeling is mostly about? So, if you have a favorite spooky build, send pictures of it our way. We'll open the files slowly!

editor@FineScale.com

Off the sprue: What is your favorite Halloween treat?

Editor
Mark Savage
msavage@Kalmbach.com

Seems we hardly ever have more than a handful of kids trick-or-treating these days. So darn it, I must eat most of the Reese's Peanut Butter Cups myself . . . maybe we should buy just one more bag!

Senior Editor
Aaron Skinner
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Any leftover trick-or-treat candy. But somehow, I always find a bag or two I "missed" when filling the bowl to hand out to the kids.

Associate Editor
Mark Hembree
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I never did like caramel apples, so I am glad they went away. I like to sneak Kit Kats whenever my wife is not looking. I also like to answer the door and say, "Who is it?" or "Yes? May I help you?" Answers from the little ones crack me up.

Assistant Editor
Elizabeth Nash
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There's no graceful way to eat one, and you're liable to loosen a tooth, but a caramel apple is so worth it.

Editorial Associate
Monica Freitag
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No specific order here, but I like Laffy Taffy, Skittles, Twix, Butterfingers, and Kit Kats, both to eat and to give out.

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Workbench photos

Just like heaven

This is my workshop. With our kids grown and out of the house, there was a spare bedroom ready for me to move into.

I'm happy because there was enough space to install a full sound system, and my wife is happy because I'm out of her way.

I'm in heaven when in this space.

– James Robertson
St. Helens, Merseyside, England

Built the place he builds

I converted our garage into my man cave where I model.

The paint booth is homemade — there's a port through the wall to vent fumes. The cabinets are metal, so I can use magnets to attach pictures and instructions of my current project.

– Dennis Rossko
Carrollton, Texas

Quite the upgrade

My modeling "career" spans some 60-odd years. In that time, my work areas have ranged from the iconic tabletop in an apartment bedroom to this wonderful space that spans half of the basement.

I know I am a very lucky guy to have such a space dedicated to my hobby.

– Ken Stroud
Calgary, Alberta, Canada

Where's a Patria Pasi

This is the Sisu Pasi that Arne worked with as the commanding officer of a Norwegian armored battalion in the NATO-led Stabilisation Force (SFOR) in Bosnia and Herzegovina, 1998-99.

I am a retired Norwegian army officer who loves to build aircraft, ships, and vehicles with which I have had personal experiences.

Having served in the United Nations Interim Force in Lebanon (UNIFIL) as well as SFOR forces in Bosnia and Herzegovina, there is one particular model kit that I miss sorely: the Finnish Patria Pasi XA 180 series, also known as the Sisu.

These days, one can find model kits of the most extremely rare military vehicles — but not of the XA series. This vehicle has been in use by 10 countries in operations for more than three decades, and hundreds have been produced. Why is there no model kit?

I think that if a 1/35 or 1/72 scale was produced, hundreds would probably be purchased in the first week of its release.

– Arne O. Hagtvedt
Vestby, Norway

Science fiction is an inspiration

Hooray for Aaron Skinner! He builds sci-fi models and is not ashamed of it!

I attended my first IPMS contest in the late 1980s. I was 30 years old and had spent three months building AMT's *Star Trek: The Next Generation* USS *Enterprise* NCC-1701D.

I had painstakingly airbrushed the complicated "Aztec" hull pattern and had drilled out hundreds of windows. Grain-of-wheat bulbs (this was before LEDs were common) lit the hull and engines, and the batteries were housed in a nifty base painted like deep space.

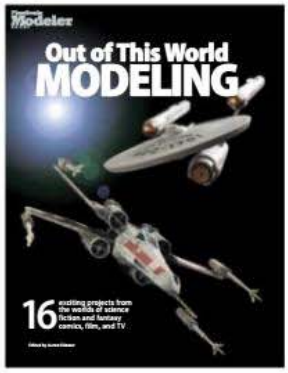
I proudly filled out the contest paperwork and handed it over to an older gentleman in an IPMS shirt and hat. Immediately he turned to a fellow modeler and said, "I gave up modeling things like this when I was 10 years old."

Now, 30 years later, I can still remember the sting of his comment and how a sci-fi entry was somehow a sign of immaturity, of less value than a "real" subject.

That's why I so appreciated Aaron's guest editorial on how *Star Wars* influenced his modeling, and Jeff McIntyre's Scale Talk letter about keeping negative comments to oneself at contests. Aaron is an inspiration, and Jeff is right!

– Louis Armour
Tupelo, Miss.

Ed.: Model what you love, Louis — that's what we say. And if you can't get enough sci-fi, look for the latest FineScale Modeler *book,* Out of This World Modeling, *on sale at www.KalmbachHobbyStore.com*

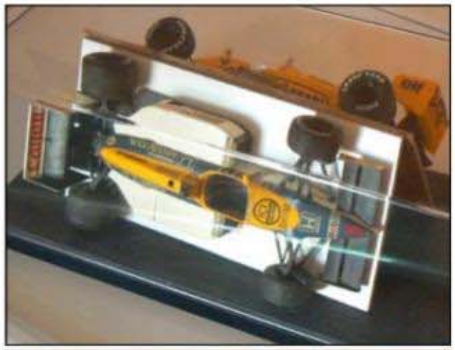

FineScale Modeler
Out of This World
MODELING
16 exciting projects from the worlds of science fiction and fantasy comics, film, and TV

Photos keep it real

I agree with Carl Jarosz (April 2017 Scale Talk) that a photo of the subject is the greatest reference a builder can have, especially when it comes to weathering. Having a photo may keep you from overdoing the weathering on places like the recessed panel lines, where inexperienced modelers make them seem more black and wide than they ever were on real aircraft.

You can also place a photo next to your finished model to prove that the amount of weathering you added is accurate.

– John Maene
Hawthorne, N.J.



Two in a space for one

I recently built an oak bookcase to hold my collection of Autocourse books and 1/24 and 1/20 scale racing cars.

Once finished, I discovered I had room for only six display cases large enough for the Tamiya 1/20 scale Formula 1 models. The trouble was, even after weeding out half a dozen kits, I still had seven models I wanted to display.

The solution: the Williams FW11 and Lotus 99T share a display case. I thought it was appropriate for them to be together because they were contemporaries.

The procedure was simple but exacting, as there is just barely enough room vertically for the two cars.

I used coated hardboard, but now I wonder whether I should have used clear acrylic. If I do it again, I'll try that.

– Mel Ewald
Riverside, Calif.

More historic figures

I have been a longtime subscriber, but I'm disappointed that the magazine does not feature more 75-120mm military and historical figures and busts.

I would like to see a little more of that genre on a regular basis, please.

– Gary Vezza
Middletown, Pa.

Ed.: Thanks for telling us, Gary. If anyone else is craving a specific subject and wants FSM *to cover it, be sure to answer our monthly issue surveys, in which we ask what you would like to see. You can find links to the surveys online and on our social media pages.*

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Free desktop wallpaper
Download a desktop wallpaper of Wingnut Wings' 1/32 scale Sopwith F.1 Camel built by Chuck Davis for Workbench Reviews and featured on p. 60 in this issue.

Online Extras
Questions about airbrushing? Tune into *Airbrushing with Aaron*, a series of short how-to videos that will answer all your queries and get you ready to paint.

Tips, tricks, and treats
If you're a subscriber, go online to find answers to your modeling questions. Just click "How To" at the top of the *FSM* home page.

The dangers of modeling

I had a potentially dangerous incident with super glue recently where I was using the "thin" formula to assemble a 1/350 scale *Liberty* ship.

I usually put a small indentation on a piece of corrugated cardboard and place a few drops of super glue therein, and use a toothpick applicator.

Not paying attention, I had uncapped the main lid instead of the applicator tip. As I attempted to put a dab of glue on the cardboard, an overly ample supply of it ran onto my workplace.

Trying to wipe up the mess with paper towels failed as the glue adhered to my fingers and prevented any attempt to clean up the disaster.

I actually saw smoke emanate from the super glue-soaked paper towel (an exothermic reaction, perhaps?).

The incident cost me two divots out of my fingers, and a blister from the heat.

Just wanted to remind some of our newer readers to be very careful when using super glue — this is not a user-friendly product. Care is recommended when using it.

– Douglas Bauer
Albany, Ore.

Find more reviews online

I truly enjoy your *New Product Rundown* video reviews with Elizabeth Nash and Aaron Skinner. Who would have thought in-box reviews could be so fun!

Keep up the great work.

– Ray Goeckerman
Raleigh, N.C.

Join the club

Recently, I joined a local model building club. We have a build meeting the first Saturday of the month at a local hobby shop, and a club meeting the third Wednesday.

All the members have varying degrees of expertise and interests. Since joining the club, I've been encouraged to build my next model better than the last.

I would encourage all model builders to join a local club. If there isn't a model club in your area, start one! Invite others to share our hobby and passion.

– Brian Mason
Alpharetta, Ga.

What happens to our models when we pass away?

A catalog for the ages

I accept that nothing lasts forever, least of all perhaps my fragile and rather esoteric plastic models. So I have a suggestion for modelers wondering what happens to our models when we pass.

I photograph every build and include a brief history of the original in a one-page Microsoft Word document.

Anyone who looks at them after I'm gone will be able to identify every model. Then they can decide for themselves whether or not the model is interesting — if not to them, then perhaps to a friend.

As a side note, I don't do this for their benefit — I enjoy the research. The process leads to fascinating insights and the discovery of some inspiring stories. I find out quite a lot about the original aircraft, the reason it was developed, the people who designed it, who flew it, where it was based, and the ultimate fate of the plane and (perhaps) the crew.

So my entire collection (currently more than 100 1/72 scale models, mostly from 1935-1955 and including quite a number that never flew in real life) is cataloged on a single memory stick.

If my descendants choose to put them all in the trash, at least they will have had the opportunity to figure out what each one was.

And even if they decide the builds aren't worth much to them, they will know the collection's worth to me.

As a completely separate matter, there is, of course, my stash of unbuilt models … Now *that's* worth a fortune!

– Nick Gladstone
New Plymouth, New Zealand

Donate, donate, donate

A modeler should arrange for finished builds to be donated to aviation and other military museums upon passing.

This would add to the display of any museum and leave a lasting legacy of the builder.

I'd bet those museums would love to get such donations.

– Lou Gregoire
Blairsville, Ga.

Some more ideas

My suggestion is to ask a local VFW organizations if it would be interested in your collection. You could even place everything, including materials, on eBay or in another auction.

But these are ideas for a builder truly in his or her later years.

In the meantime, I hope readers wondering about the fate of their creations will continue to model their hearts out. We certainly can use as many modelers as we can get.

– Chris Paterson
Manteca, Calif.

Compiled by Monica Freitag & Aaron Skinner

Spotlight

Modern Flanker fun from Kitty Hawk

Sukhoi's Su-27, known to NATO as the Flanker, and its descendents is ubiquitous in the Russian air force. Kitty Hawk's 1/48 scale kit (No. KH80142, $82) replicates the ultimate Flanker, the Su-35, with thrust vectoring for maneuverability, stealthy airframe, and improved targeting.

Fine recessed panel lines, precisely aligned rows of petite rivets, and some raised features mark the major airframe components. All of the control surfaces are separate and the flaperons are made to droop.

Cockpit detail comprises a multipart ejection seat with optional cushions and photo-etched harness, a clever instrument panel with sharp HUD, and molded switches and dials on the side consoles.

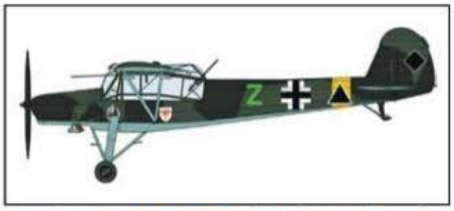
Features include: detailed landing gear and bays, open or closed auxiliary intakes, posable refueling probe, and detailed exhausts, although the vectoring nozzles can't be posed drooped as seen on the grounded Su-35s.

Decals provide markings for three Russian and three Chinese Flankers.

AIRCRAFT KITS

1/32 SCALE

Vought F4U-1D Corsair from Tamiya, No. 60327, $188.



Fieseler Fi156C Storch Schlachtgeschwader 1 from Hasegawa, No. 8250, $69.99.

1/48 SCALE

H-19 Rescue helicopter from Revell, No. 85-5331, $20.95.

UH-1D Huey from Kitty Hawk, No. KH80154, $55.99. Look for a detailed review in an upcoming issue of *FSM*.

Kawanishi N1K1-Jb Shiden "George" Type 11 Otsu Rollout from Hasegawa, No. 07449, $52.99.

Kyushu J7W2 Interceptor Fighter Jet Version from Hasegawa, No. 9846, $59.99.

Sea King HAR Mk.3 Falklands from Hasegawa, No. 7456, $89.99.

Nakajima B6N2 Carrier Attack Bomber Type 12 from Hasegawa, No. 9062, $37.99.

Mitsubishi F-2B 21SQ 40th Anniversary from Hasegawa, No. 7457, $69.99.

1/72 SCALE

Spitfire Mk.IIa from Revell, No. 03953, $10.95.

Mitsubishi J2M3 Raiden (Jack) Type 21 302nd Flying Group Combo Part 2 from Hasegawa, No. 02234, $52.99.

Kawasaki T-4 Blue Impulse 2017 (2 kits) from Hasegawa, No. 0249, $52.99.

F-15 Active/Integrated Flight Control System from Hasegawa, No. 2251, $69.99.

Nakajima Ki-43-II & Ki-44-II with fuel truck (2 kits) from Hasegawa, No. 0248, $52.99.

Pilatus PC-9s Galore from OzMods, No. 7204, $33. Decals for six aircraft.

EA-18G Growler VAQ-141 Shadowhawks 2017 from Hasegawa, No. 0250, $49.99.

ARMOR KITS

1/16 SCALE

Panzer Jagdpanther from Tamiya, No. 36210, $534.

1/35 SCALE

German 3.5-ton truck AHN with 3.7cm FlaK 37 AA gun from Tamiya, No. 32410, $54. Truck parts from ICM.

KV-1 (Type-C) Russian heavy tank from Tamiya, No. 35066, $24. Reissue.

Centurion Mk.III British Army from Tamiya, No. 25412, $34. Limited edition, reissue.

KV-2 Gigant Russian heavy tank from Tamiya, No. 35063, $31. Reissue.

British LRDG. command car (30 cwt truck) from Tamiya, No. 35092, $20. Reissue.

SdKfz 7 German 8-ton halftrack from Tamiya, No. 35148, $38. Reissue.

IDF Magach 3 with ERA from Dragon, No. 3578, $69.99.

Spotlight

Thunder strikes Hetzer of a different note

More than 100 Hetzer-based recovery vehicles were built in late 1944. A few dozen more were converted from Hetzer tank destroyers. The vehicle was equipped with a folding-jib crane capable of lifting engines and other vehicle components.

Thunder Model has released a couple of 1/35 scale kits of the Bergepanzer Hetzer, including this early version (No. 35102, $59.99).

Sharply molded rivets, bolts, and weld seams mark the hull. The distinctive 38(t) suspension comprises hull supports, inverted leaf springs, and road-wheel arms, wheels with rivet, hub, and tire details, and link-and-length tracks.

The kit includes an interior with transmission and detailed driver's position.

The crane can be stowed or raised with winch, controls, and hook; wire, chain, and thread rig the crane.

Photo-etch supplies grilles, controls, supports, brackets, and wing nuts.

For more information: www.thundermodel.com.

Matilda Mk.III/IV Red Army infantry tank from Tamiya, No. 35355, $65. Military Miniature Series 355.

M67A2 flamethrower tank from Dragon, No. 3584, $64.99. Modern AFV Series.

IDF M3 halftrack Nord SS-11 anti-tank missile carrier from Dragon, No. 3579, $72.99. 50th Anniversary The Six-Day War.

M752 tactical ballistic missile launcher from Dragon, No. 3576, $69.99. Modern AFV Series, Smart Kit.

PzKpfw IV Ausf D from Dragon/Platz, No. 6873, $54.99. 1939-1945 series.

SdKfz 251/16 Ausf C mit 14mm Flammpanzerwagen from Dragon, No. 6864, $69.99. 1939-1945 series.

Geschutzwagen 38 H fur sIG 33/1 from Dragon, No. 6857, $74.99. 1939-1945 series. German self-propelled gun crew included.

StuG III Ausf A Michael Wittmann LAH Barbarossa 1941 from Dragon, No. 6860, $79.99. 1939-1945 series. Smart Kit.

T54E1 from Dragon, No. 3560, $49.99. Smart Kit. Black Label.

More at www.FineScale.com

Check out our New Product Rundown (NPRD) videos as Elizabeth Nash and Aaron Skinner have fun looking at the latest kits!

Sherman M4A1(76)W VVSS with logs and backpacks from Cyber-hobby.com, No. 9155, $46.99. Super value pack.

Grille 30-30.5cm(Grw) L/16 Morser "Bar" (Bear) from Trumpeter, No. 9535, $59.95.

U.S. road roller from Plus Model, No. 467, $136.40. Resin.

1/72 SCALE

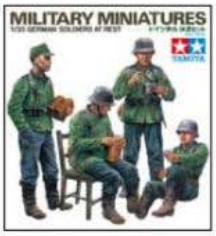
M1A2 Abrams SEP Main Battle tank from Flyhawk Model, No. FH3300, $36. Look for a detailed review in an upcoming issue of *FSM*.

FIGURE KITS

1/10 SCALE

Frank Frazetta's Death Dealer from Moebius Models, No. 961, $69.99. Look for a detailed review in an upcoming issue of *FSM*.

1/35 SCALE



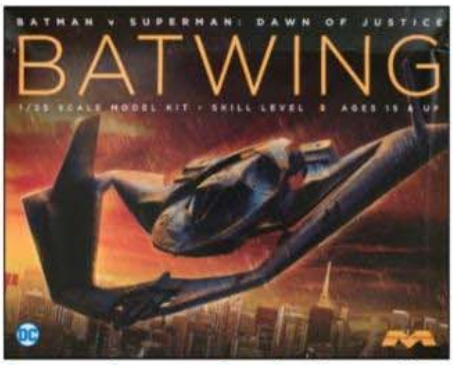
German Soldiers at Rest from Tamiya, No. 35129, $8.75. Reissue.

1/48 SCALE

P-51 pilot from Plus Model, No. AL4072, $11.50. Aero Line.

SCI-FI KIT

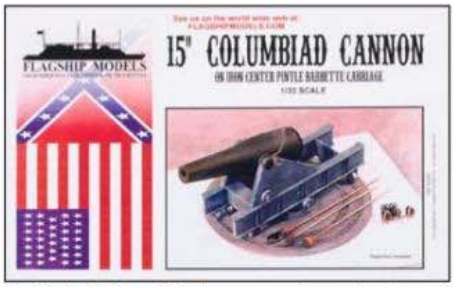
1/25 SCALE



***Batman v Superman* Batwing** from Moebius Models, No. 969, $99.99.

MISCELLANEOUS

1/32 SCALE



15-inch Columbiad cannon from Flagship Models, No. FM13235, $35.

1/35 SCALE

Suitcases from Plus Model, No. EL061, $4.60. Easy Line. 4 pieces

Beer and lemonade crates from Plus Model, No. 422, $17.30.

Jetty from Plus Model, No. 500, $35.60. Laser carved wooden parts.

AIRCRAFT DETAILS

1/48 SCALE

Kawanishi Ki-61-Id gun barrels (for Tamiya) from Eduard, No. 648 321, $4.95. Brassin Line.

Crusader air intakes (for Hasegawa) from Eduard, No. 648 301, $7.95. Brassin Line.

Crusader exhaust nozzle for (Hasegawa) from Eduard, No. 648 302, $19.95. Brassin Line.

1/72 SCALE

Wheels for P2V Neptune (for Hasegawa/ Revell) from Plus Model, No. AL7018, $9.70. Aero Line.

ALL SCALES

NATO HAS (Hardened Aircraft Shelter) set in 4 scales. The set includes 3 cardstock prints (2 base components + 1 backdrop) that depict the inside and outside of a contemporary NATO HAS. Available in 1/72 No. 7230 $14.90; 1/48 No. 4830 $20.30; 1/144 No. 144030 $10.80; Also 1/32 No. 3230 $65.10, includes a set of 3 plotter-prints. Set comes inside a sturdy carton tube and is shipped rolled like posters. From Noys Miniatures.

SCI-FI DETAILS

OTHER SCALE

Proteus submarine photo-etch (for Moebius) from ParaGrafix, No. PGX205, $41.95.

Millennium Falcon engine grilles from ParaGrafix, No. PGX204, $49.95. For DeAgostini kit issues 91 and 96.

Millennium Falcon engine vents from ParaGrafix, No. PGX206, $53.95. For DeAgostini kit issues 96 and 97.

AIRCRAFT DECALS

1/32 SCALE

T-28B/D Trojan from Caracal, No. CD32019, $13.99.

USMC AH-1W Whiskey Cobra, from Caracal, No. CD32021, $13.99.

F-16C Baby Got Fullback Aggressors, from TwoBobs Aviation Graphics, No. 32-067, $14. Also available in 1/48 (48-256) and 1/72 (72-104) scale. For Tamiya and Academy F-16C.

1/48 SCALE

Vickers Supermarine Walrus Collection Part 2 from Hannants, No. X48178, $10.25.

USAF T-6G Texan from Caracal, No. CD48098, $11.99.

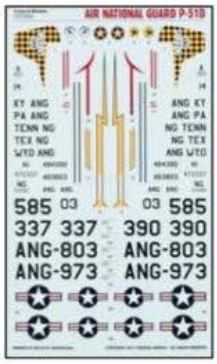
USAF Early T-33A from Caracal, No. CD48123, $13.99.

Messerschmitt Bf 109 Stab Part 1 from Hannants, No. X48169, $10.25.

1/48 SCALE

Handley Page Victor Collection from Hannants, No. X72265, $10.25.

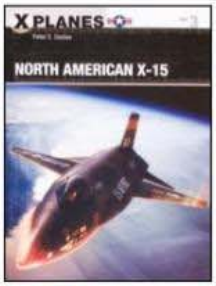
B-52H Stratofortress from Caracal, No. CD72058, $17.99.



P-51D Air National Guard from Caracal, No. CD72054, $11.99.

BOOKS

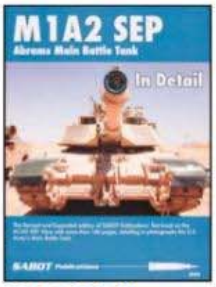
Aviation Records In The Jet Age, $39.95, by William A. Flanagan Lt. Col. USAF (Ret), hardcover, 192 pages, 47 color photos, 228 black-and-white photos, ISBN: 978-1-5800-725-02. From Specialty Press.



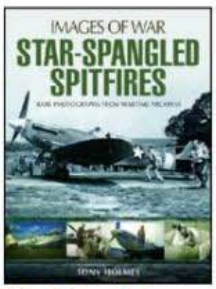
North American X-15, $20, by Peter Davies, softcover, 48 pages, few color photos, mostly black-and-white photos, ISBN: 978-1-472-8199-18. From Osprey Publishing.

Nakajima B5N Kate and B6N Jill, Units, $23, by Mark Chambers, Tony Holmes, softcover, 96 pages, all black-and-white photos, ISBN: 978-1-472-8187-44. From Osprey Publishing.

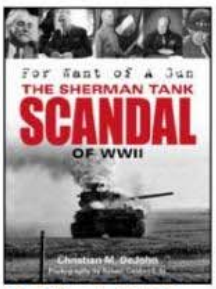
Luftwaffe Emergency Fighters, $20, by Robert Forsyth, soft cover, 80 pages, all black-and-white photos, ISBN: 978-1-472-8199-49. From Osprey Publishing .



M1A2 SEP Abrams Main Battle Tank, $35, softcover, 144 pages, all color photos, ISBN: 978-0-9973-774-84. From Sabot Publications.



Star-Spangled Spitfires, $22.95, by Tony Holmes, softcover, 100 pages, all black-and-white photos ISBN: 978-1-4738-892-31. From Pen & Sword Books Limited.



For Want of A Gun — The Sherman Tank Scandal of WWII, $84.99, by Christian M. DeJohn, photography by Robert Coldwell, Sr, hardcover, 392 pages, 557 color and black-and-white photos, ISBN: 978-0-7643-525-08. From Schiffer Publishing.

FineScale Modeler

SPOOKTACULAR 2017

If *The Simpsons* can have a Halloween special every year, why not us? After all, we deal with sharp knives, saws, and sticky, sometimes slimy, substances as we bring our own creations to life — although we hope they don't end up looking like Frankenstein unless we're *modeling* Frankenstein!

So this year we bring you our stash of Demons, Vampires, Black Widows, tanks with scary nose art, and castles that *could* be made creepy. Really! Oh, and there's Franky, too. You can't have Halloween without him!

MODEL BY JOE MARTINEZ

By Mark McGovern

Go dotty on Frankenstein's monster

Armor-weathering technique brings a monster to life

"The lightning. It is good for you. Your father was Frankenstein, but your mother was the lightning."

***– Ygor, after the monster is struck by lightning in* The Ghost of Frankenstein**

Dot filters — myriad spots of artist's oil colors blended into a surface — are routinely used by armor modelers to subtly alter the tone of monochromatic base coats. But horror figures are my primary interest, and I wondered if the same technique could enliven painted flesh tones.

To test the idea, I worked with Geometric Design's 1/4 scale bust of Lon Chaney Jr. as the monster in *The Ghost of Frankenstein* (1942). A touch of putty and scraping eliminated a single mold seam. I epoxied the kit's steel mounting pin into its predrilled hole, then washed the bust with soap and water to remove mold-release agents and skin oils, which could interfere with paint adhesion.

1

Frankenstein's monster is typically represented with green skin because Jack Pierce, the makeup designer behind most of Universal's classic monsters, used a pale green color on the monster. The idea was to give the creature a deathly pale appearance in black and white. To mimic that appearance, I sprayed the head with Testors Model Master olive drab over a coat of Krylon gray sandable primer. The base color would show through overlying flesh colors, so my monster would never look like he'd just left a health spa.

2

I like artist's oils to paint flesh tones: They dry slowly, giving me time to play with the colors during each painting session. I started with the darkest flesh tones, using a shadow mix of burnt umber, yellow ochre, and alizarin crimson. Vallejo acrylics colored the deeply recessed eyes.

Next Issue

Instructions for painting a German officer's black leather coat.

For basic flesh, I mixed the shadow color with a little titanium white and dry-brushed the entire face, even over the shadows. Artist's oils can be brushed lightly enough to reveal underlying hues, making them ideal for replicating flesh.

Dry-brushing seldom creates a strong effect with a single application, so the next day I repeated the process.

This layer was followed by a lighter mix of the skin color, dry-brushed over prominent features and kept away from shadows. I sealed the surface with an airbrushed mix of Pledge FloorCare Multi-Surface Finish (PFM) and Tamiya flat base, then set the monster aside to dry for a couple of days.

Can you spot the difference? I applied dots of artist's oils over the head, sticking with the colors used to mix the flesh tones, including alizarin crimson, burnt umber, viridian (a deep, cool green), and yellow ochre. I concentrated the colors in different areas to get the most lifelike effects, like the reddish tinge of the cheeks, nose, and chin.

I dipped a ¼-inch flat brush in mineral spirits and blotted it so the brush was moist but not dripping with solvent. Then I lightened and blended the color dots with a dabbing motion, stopping frequently to remove paint from the bristles and rewet the brush. The first application toned down the intensity of the dots.

Instead of dragging the brush in a single direction, as when weathering a tank, I created patches of color. In the end, I had a pretty colorful Frankenstein — maybe a little *too* colorful.

If there is any hard and fast rule in figure painting, it would be that there are no hard and fast rules. I sealed and protected the dot-filter work with the PFM and Tamiya flat base mix, then toned down the contrasts by dry-brushing the highlight flesh color over the most prominent features.

After painting the monster's hair black, I lightly reapplied the dot filter over the highlights to tweak the tones.

To finish my creation, I dry-brushed light browns and grays over the hair. I lightened the black clothes with greenish gray dry-brushed over the coat and shirt. Vallejo oily steel and silver added a metallic sheen to the staples and electrodes. *It's alive!* **FSM**

By Aaron Skinner

Modulation and dust for a Vietnam tank

Decal solvent settles scary grimace

The round extension at the bow of an M48 just begs to be decorated, and the 919th Engineer Company (Armored) did just that in Vietnam. Toothy grins and wild eyes reminiscent of art applied to tanks during the Korean War graced the nose of many of the unit's Pattons.

John Brubaker of Mesa, Ariz., built *Wild One 4* of the 919th from Dragon's 1/35 scale M48A3. He improved the kit with AFV Club individual-link tracks and a Def.Model resin searchlight for the main gun. Resin stowage from Legend Productions fills the fenders, a bustle basket on the turret, and a scratchbuilt rack on the engine deck.

To cover the disparate materials and prepare the surfaces for paint, John applied Krylon spray-can gray primer. "I know it's a rattle can, but it's excellent paint," he says. "It's fine-grained and sprays great. I also use it to prime figures."

Humbrol enamels provided the camouflage colors. No matter what brand of paint he is using, John prefers the manufacturer's recommended thinner. He mixed 85% dark green (No. 116) paint and 15% thinner, spraying it at 25 psi through an Iwata Eclipse powered by a Craftsman compressor. He progressively lightened the green by adding ochre (No. 83) and white (No. 34). Spraying these shades on the tank's upper surfaces, John modulated the monochromatic camouflage and mimicked fading caused by the tropical sun. **FSM**

Meet John Brubaker

John started modeling at 10 when his grandmother gave him a car kit. He took up model railroading after an uncle gave him and his brothers a train set. By 13, he'd moved on to tanks and other military vehicles. Fantasy gaming miniatures from Heritage and Ral Partha also found room on his workbench.

"I was away from the hobby until 2002, when I started building a Dragon Kettenkrad and (Eastern Front) German paratroopers," John says. He credits his friend, Jim Stute, with teaching him to use artist's oils.

John likes to build American, British, and German armor from World War I to today, but goes back farther for figures where his interests include medieval knights — both European and Asian — as well as ancient armies, troops from both world wars, and fantasy.

Crew: *John painted Alpine Miniatures Vietnam War tankers with artist's oils. "The sculpting is excellent on these figures," he says.*

Weathering: *After flowing washes of dark brown artist's oil thinned with mineral spirits into recesses and around detail, John dry-brushed highlights with a brighter shade of the camouflage. Mig Productions pigments added layers of Vietnam's characteristic red dust.*

Decals: *The kit decals provided all of the Patton's markings, including the face. John used Solvaset to settle them over the curves and cast texture.*

Groundwork: *John spread a thin layer of DAP Presto Patch over a wooden plaque and sprinkled on real dirt for texture. After spraying it with terracotta-colored paint, he highlighted the road with Mig Productions pigments. Woodland static grass added foliage to the verges.*

An intricate web of detail embellishes this 1/48 scale night fighter

Bedeck a BLACK WIDOW

BY BILL PLUNK

The P-61 Black Widow has fascinated me since my days as a kid, hearing my grandmother tell stories about working in the Northrop assembly plant building them during World War II — a real-life "Rosie the Riveter." There's also no denying the appeal of the distinctive twin-tail design. The Great Wall Hobby (GWH) 1/48 scale kit offered the chance to do it in style.

I opted for the special release of the kit (No. S4802), since it includes some extra goodies not in the standard kit. The kit supplies Eduard photo-etch (PE) detail sets (Nos. 49703 and FE704) to dress up the interior, and the Eduard Brassin resin wheels set (No. 648057).

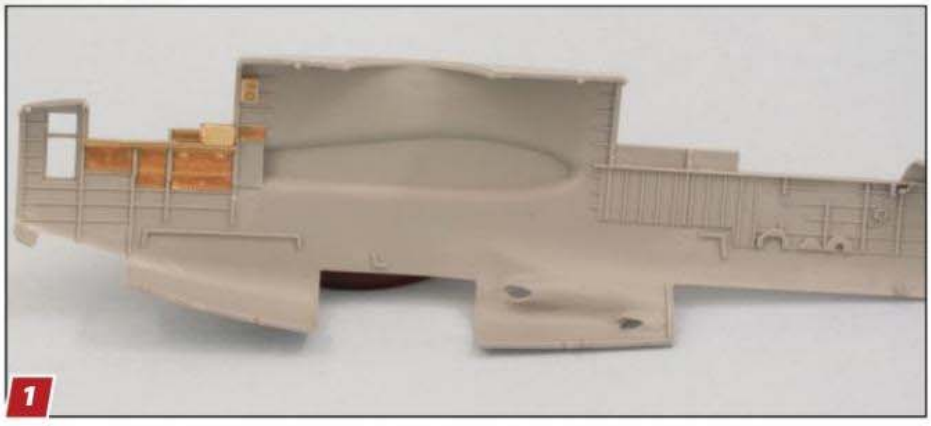
All paints used are Testors Model Master enamels unless otherwise noted.

Detailing the inside

Starting with the crew's fuselage pod, I detailed the radar operator's space in the rear with Eduard PE, ***1***. I cleaned up the bulkhead that integrates with the 20mm gun bay module and assembled that. The 20mm muzzles were too shallow, so I drilled them out with a micro drill bit. The operator's bulkhead was installed, and PE detail was added, ***2***.

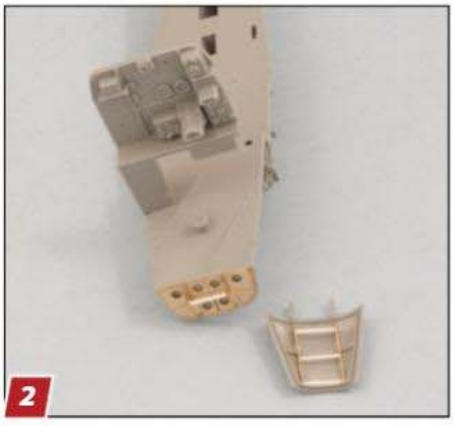
I assembled the crew seats, front crew-access hatch and ladder, and the remote controls for the top gun turret, ***3***. On the instrument panel, molded-on details were removed in favor of pre-painted self-adhesive PE, ***4***.

Decals meant for the front instrument panel decorated the gauge faces on the rear radar operator's area. Additional detail, courtesy of the Eduard set, dressed up both



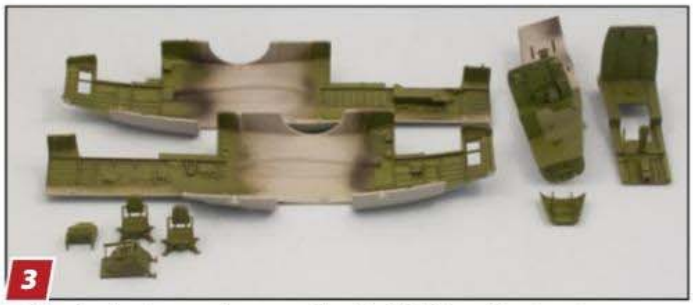
1

Ejector-pin marks were cleaned up with a micro chisel, and strategic sanding ensued.

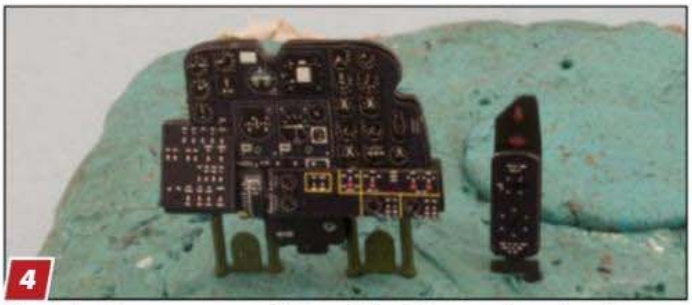


2

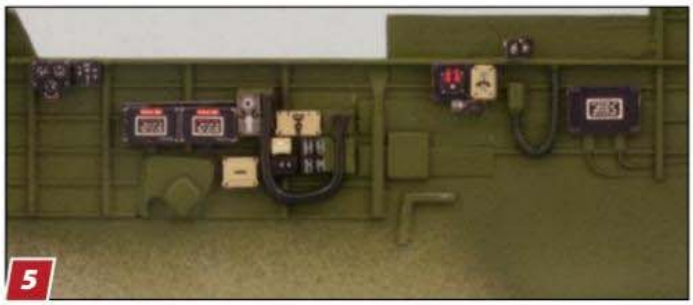
The radar operator's area gained PE details and an access ladder.



I airbrushed primer and a coat of flat black, followed by interior green on the exposed crew areas.

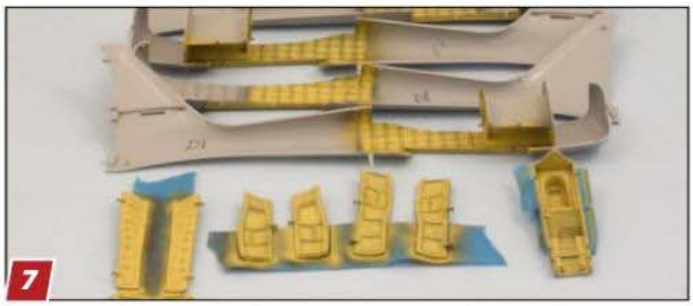


The cockpit instrument panel after adding PE upgrades and making modifications.

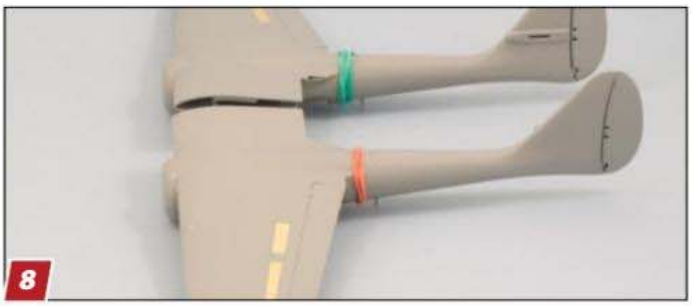


Here is the right side of the front cockpit with PE upgrades installed.

I hand-detailed the oxygen cylinder, gun remote control, and radar-scope hoods. Here are the crew areas after all the detailing.



The gear bays and doors after being airbrushed flat back, followed by a zinc chromate main coat.



Rubber bands kept the join between the wings and booms tight.

sides of the cockpit, ***5***. I added the oxygen cylinder and fire extinguisher and installed both crew seats and Eduard seat belts, ***6***.

Assembly

With the aid of clamps, the wing halves went together with an even join. I assembled the rear stabilizer and the inner flap portions that connect the wings to the fuselage pod. The tail boom halves were cleaned up and the gear bays installed in one side to make it easier to define the visible areas for painting while keeping them accessible.

Engines were assembled so I could see how much of the cowl interiors would be visible; I applied zinc chromate there and along the exposed edges of the open cowl flaps. Primer and a pre-shade of flat black was airbrushed, followed by thin layers of zinc chromate, ***7***.

I joined the fuselage-pod halves using clamps and rubber bands, then added the radar operator's hatch in the closed position. Tail booms were assembled next. The PE intake screens were annealed, shaped into the correct curve, and installed on the undersides. Booms were joined with the wings using a combination of tube and liquid glue, ***8***.

The special edition of the kit includes a clear radome nose and a white-metal counterweight. The nose bulkhead was added to the fuselage pod and the radome installed, ***9***. Once the glue set, I sanded the join and brushed on Pledge FloorCare Multi-Surface Finish (PFM).

For a final detail, I assembled the quad-mount .50-caliber machine gun turret, keeping it loose to make painting easier.

Painting

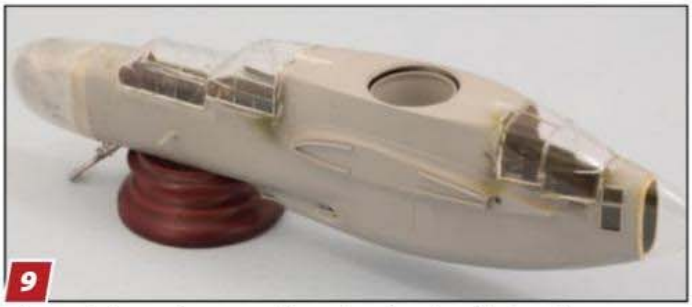
The kit includes 40 different flexible vinyl pre-cut masks that address most of the clear canopy areas. The small side windows on either side of the radar operator's area don't have masks, so I used leftover vinyl to create my own. The masks were burnished down with a toothpick and trimmed with a No. 11 blade, ***10***.

A base coat of flat black was airbrushed slowly, in multiple thin passes. I lightened the black with a few drops of light gray and post-shaded panel centers, ***11***. Foam stuffed into the cowls protected the earlier work.

While that paint was drying, I focused on the R-2800-10 Double Wasp radial engines. The cylinder heads were painted with non-buffing Metalizer gunmetal while the crankcases were detailed with gunship gray. The kit-supplied PE wiring harness and ignition ring added further details. I posed the cowl flaps open to display the exhaust pipes, ***12***.

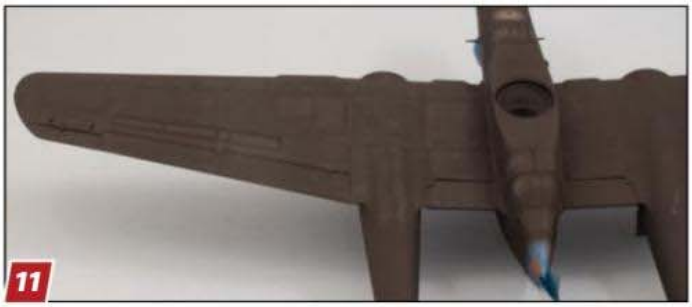
I masked the propellers and airbrushed the hubs insignia red and tips RLM *gelb*.

The engines were attached to the cowl-flap base, and the full engines were mounted on the booms using tube glue. To avoid marring the paint, the cowls were lined up and installed with liquid glue on their inner contact surfaces. I picked out the 20mm cannons and .50-caliber

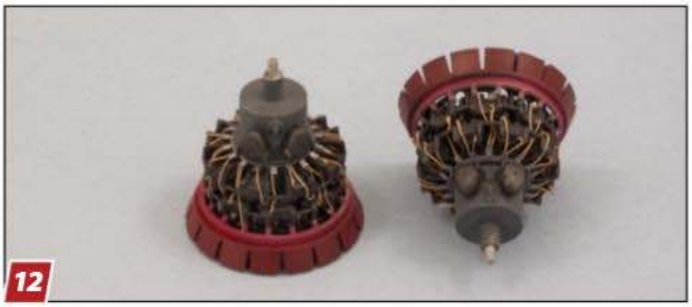


I donned a latex glove to avoid marring the clear plastic with fingerprints when installing the canopy.

After gluing the wings, I let them set up before using rubber bands to pull the tail booms together slightly to connect with the rear stabilizer.



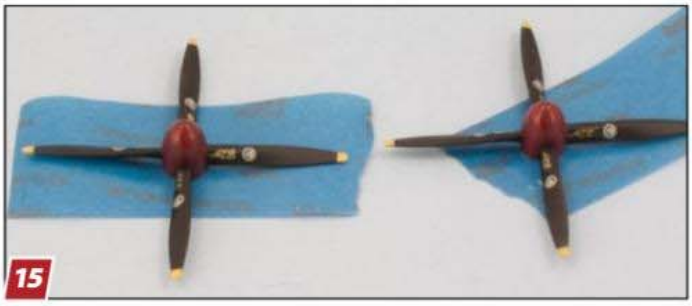
After a flat black base coat, I airbrushed a dark gray on panel centers, cowls, turret, and gear doors.



Exhaust pipes were painted non-buffing Metalizer gunmetal followed by a thinned wash of leather for a rusty and oxidized look.

Gear down: Wheels are painted gunmetal with brighter Metalizer steel on the hubs.

The decals are for P-61B-2 *Lady in the Dark* as she was marked while with the 548th Night Fighter Squadron, based on Iwo Jima in 1945.



Here are the props complete with added decals.

The dark and light gray were blended together with a square-tipped shader brush lightly dampened with thinner.

machine guns with non-buffing Metalizer gunmetal and installed the turret.

My attention now turned to the landing gear and bays. I cleaned up the resin replacement tires and hubs and hand-painted the hubs with non-buffing Metalizer steel. The wheels were airbrushed gunmetal.

The main gear struts were installed and the wheels added. Doors completed the gear assembly, ***13***.

Finishing touches

I airbrushed PFM before adding the kit-supplied decals, ***14***, ***15***. They were treated with Walther's Solvaset, and once set, a second coat of PFM sealed them.

I mixed up a 9:1 shade of flat black and light gray. Small dots of this along with light gray were applied in small sections and blended with a thinner-damp brush, ***16***. This dot filtering took nine hours to apply, and I wore a respirator throughout.

I airbrushed a sealing coat of clear gloss in light passes to create a hint of sheen without overpowering the weathering effects. I removed the vinyl masks and used a cotton shirt and wooden toothpick to buff out adhesive residue. A square-tipped brush applied a final coat of PFM to the canopy glass. Lastly, I installed the wingtip lights, under-wing lights, fuselage side antennas, and propellers. With that, *Lady in the Dark* was ready to take to the skies! **FSM**

SPOOKTACULAR 2017

Camo for a de Havilland Vampire

Upgrade Airfix's 1/72 scale jet with photo-etch and new decals

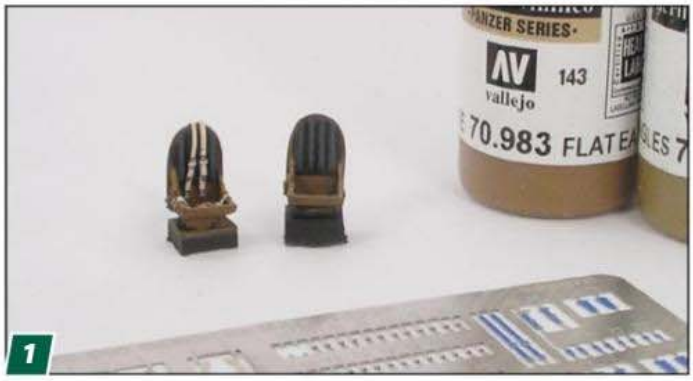
BY ANDERS ISAKSSON

The Vampire was de Havilland's first jet aircraft and the second jet to enter service with the Royal Air Force in 1944, after the Gloster Meteor. Following World War II, it replaced many piston-engine fighters and was in front-line service until 1953. So successful was the design that Vampires remained with the RAF until 1955 and were exported to more than 30 countries.

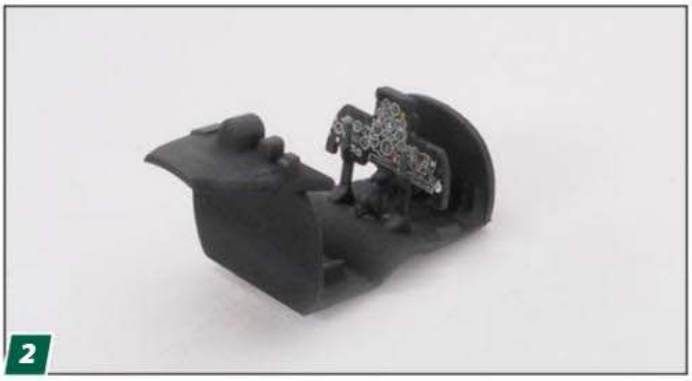
The Swedish air force gave the two-seat trainer the designation J 28C. When I found Xtradecal had markings for two-seat Swedish Vampires, I jumped at the chance to build Airfix's 1/72 scale Vampire T.11 and dress it in standard camouflage of olive green over gray. I left the canopy open and filled the cockpit with extra detail.

3,268

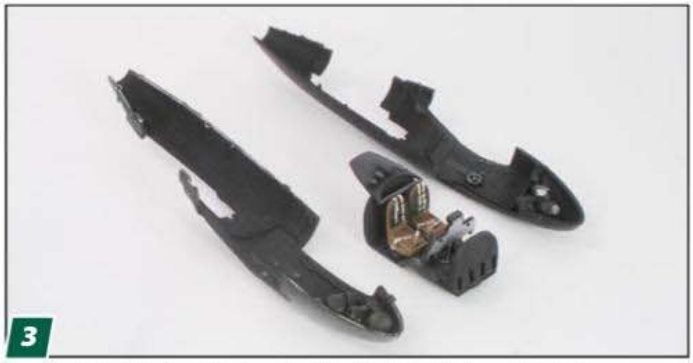
Number of Vampires built between 1946 and 1979.



Peculiar to Swedish Vampires was the Bakelite seating in lieu of ejection seats. I used Pavla resin seats made for a Spitfire and replaced the molded seat belts with photo-etch (PE) from Eduard.



Scrap styrene, lead wire, and a set of pre-painted PE parts from Maestro Models decorated the instrument panel before it was mounted in the cockpit.

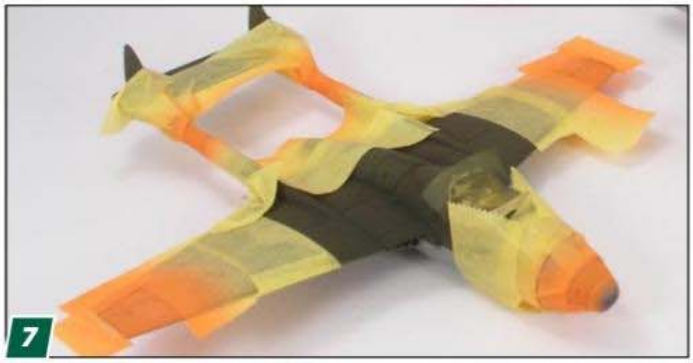


To paint the interior, I first coated it with Citadel chaos black from a spray can. Then I airbrushed the cockpit a gray-black mix of Tamiya acrylics to make details stand out. Vallejo gray applied with a fine paintbrush highlighted a few areas.

Construction proceeded without major drama — everything fell into place. When painting the exterior, I used Tamiya paints (except where noted), starting with fine white primer. Then I airbrushed flat black (XF-1) on the canopy frames.

The underside of the camouflaged machine was painted with medium sea gray (XF-83), …

… the top side with a mix of equal parts dark green (XF-61) and olive drab (XF-62). Wheel wells were painted with Vallejo aluminum.



A lot of time and tape went into creating Day-Glo stripes. I first painted each field with flat white (XF-2), then followed with several thin layers of LifeColor matte fluorescent orange (LC 23).

The Xtradecal decals performed well. The "No Step" markings had minimal carrier film holding them together. However, with a wet paintbrush and a steady hand, I nudged them into position. *Phew*!

Once the decals dried, a layer of flat clear (TS-80) sealed and dulled the finish and unified paint and decals.

To achieve subtle color variations and replicate traces of dirt on the underside, I sprayed very thin coats of NATO black (XF-69). I covered the whole underside but concentrated on the engine covers.

To create a paler tone for the top, I used the green base color lightened with a few drops of dark yellow (XF-60). Dirt and oil around the engine covers came from thinned NATO black. Then I sprayed the entire model with a thin layer of flat clear.

In addition to mounting delicate details like the landing gear and an antenna below the belly, I needed to do something about the pitot tube that, of course, broke off during construction. To make a new one, I fit piano wire inside thin brass tubing, giving it a telescopic appearance. The new pitot tube was installed with super glue and painted.

Additional wear and tear close to the cockpit came from aluminum artist's pencil; light green around the hatches simulated scuffed and worn paint.

Finally, I accentuated the tire treads by brushing on a thin layer of faded Mig Productions panzer gray pigment powder. **FSM**

Castle Neuschwanstein was a fairy tale refuge for King Ludwig II (also known as the "Mad King"), but building Doyusha's 1/220 scale model kept it real for a happy wife.

A palace fit for a queen

Recalling a Bavarian holiday brings quality time /// BY KARL LOGAN

Among the revolutionary changes to the scale modeling hobby in recent years is the rise of forums and knowledge-exchange centers on the internet. My favorite — the one I consider my cyber-modeling "home" — is the forum on www.FineScale.com.

Besides the multitude of old and new techniques, hints, tips, and reports of kit errors and strengths, the forums provide social grist for modelers who may have otherwise felt isolated at their workbench. Now, friendships are made, opinions exchanged, and off-topic subjects generate a sense of community among fellow hobbyists.

One popular and frequent topic is the opinion of spouses or significant others regarding the hobby. Let's admit it — modeling is usually a solitary pursuit. Some partners actively support and encourage modelers' efforts; others grant the time grudgingly or, sometimes, not at all.

My way of "spreading the cheer" is to take a few weeks each year to build something special for my wife for Christmas. This year, I commemorated our dream vacation to the "fairy tale" Neuschwanstein Castle in Bavaria, Germany, the inspiration for the famous castle of Disneyland's Magic Kingdom. Doyusha's 1/220 scale kit is rare, but I scored one on eBay.

I was surprised that the box contained a pretty accurate base, complete with greenery materials. I skipped the latter and made my own groundwork.

Starting with the main building, I ran liquid styrene cement into the wall joints, careful to get a seam I could file smooth, then clamped and banded it to let the glue set.

The base had deep ejector-pin marks; I filled them with Squadron green putty, planed smooth with a Micro-Mark mini-chisel.

Stippling Mr. Surfacer 500 added a primer and texture to the smooth plastic base.

I airbrushed the base with custom mixes of Tamiya acrylics. The first color was a light gray stone; then I added black and a touch of brown to shadow folds and creases, leaving salients the lighter base color.

Test-fitting with the base as I worked, I completed the castle components so I could paint them separately.

With so many tiny windows, I painted the interior black to provide an illusion of depth, hand-brushing cheap craft-store acrylic.

A quick spray of Tamiya Fine Surface white primer from a spray can, followed by a coat of Tamiya flat white, prepped the castle walls.

Using FolkArt acrylic craft paints, I painted several parapets and dormers tan. The gatehouse is Pennsylvania clay, with the interior a combination of tan and goldenrod.

Part of the gatehouse and its conical towers have conspicuous brickwork, but it's not molded in the model. Using a medium-point brush, I mixed a palette of artist's oils and "swished" and stippled stonework.

Individual bricks were painted with craft acrylics in various shades of red-browns, browns, and gold.

I painted roofs with a mix of black and tan, and detailed with pinwashes of dark umber applied with a fine brush. The white walls got some color mapping, done by applying patches and swaths of almost-white, very light brown/gray with a wide brush, then quickly dabbing lightly with a facial tissue to leave random splotches of color. Additional dark pinwashes deepened recesses.

Some of the roofs have the green patina of copper plating. I used white artist's oil with a smidgeon of olive for a thick wash I drew down with a thinner-soaked brush.

I made sure no light would show through the windows by lining the interior with black construction paper. Then I mounted the castle on the base with gap-filling super glue.

Landscaping began in an inner courtyard by sprinkling a mixture of Woodland grass powders on a square of Aleene's Tacky Glue; it's like white glue.

I studied photos to know what was green and what was rock, then brushed the tacky glue in grassy areas …

… to sprinkle on a green/brown mixture of Woodland grass powders. After it dried, I sealed it with a spray of Testors Dullcote. Then I applied darker greens and browns to deepen crevasses and shadowy areas.

We visited Neuschwanstein in summer, but I wanted to surround it with vivid autumn colors. I used Woodland Fine Leaf Foliage Fall Mix for deciduous trees, "planting" the leafy bits with white glue.

Model railroad pine trees dot the hill, too. I drilled and bored into the base plastic and anchored them with gap-filling super glue.

I was close to finishing, but not 100% satisfied. If there were fallen leaves *on* the trees, there would be more *under* them! I strapped on my three-stage respirator, mixed fine, colored "flower" powders mixed with static grass, moistened the trees and ground with Dullcote, and sifted this colorful dust over all of it. Voila! It thickened the foliage and lent a convincing layer of autumn to the groundwork.

The final, personal touch was two 1/144 scale figures approaching the castle. By modifying them with putty, I portrayed myself (with long hair) and my wife. They are over-scale, being about twice the size they should be, but the best I could find. (Call it forced perspective.) On Christmas Eve I presented my masterpiece to my very surprised and teary-eyed bride — who definitely approved the project. **FSM**

The Mad King's fairy tale fortress

Photo: Thomas Wolf, www.foto-tw.de

Castle Neuschwanstein was the fantasy castle of Bavaria's King Ludwig II, who reigned from 1864 to 1886. Inspired by the works of composer Richard Wagner, it became a retreat from the reality of Bavaria's defeat by Prussia for the reclusive monarch known as the "Mad King." The castle rests high on a heavily forested outcrop over the Pöllat River, which carves a steep gorge behind the castle.

Neuschwanstein means "New Swan Stone Palace," a reference to the swans which adorned the shield and family crest of Wagner's Lohengrin, whose story was based on the medieval legend of the Swan Knight. In the shadow of Neuschwanstein are Hohenschwangau (the castle of Ludwig's father) and famous Swan Lake. Swan motifs grace both castles.

When he agreed to build AZ Model's 1/48 scale F3H-2 Demon for a client, John Fox accepted the challenge of superdetailing everything he could. So he rolled out his scratchbuilding skills and all the aftermarket goodies he could lay his hands on — and if the jet had been equipped with a kitchen sink, it would have been on there, too!

Conquering a Demon

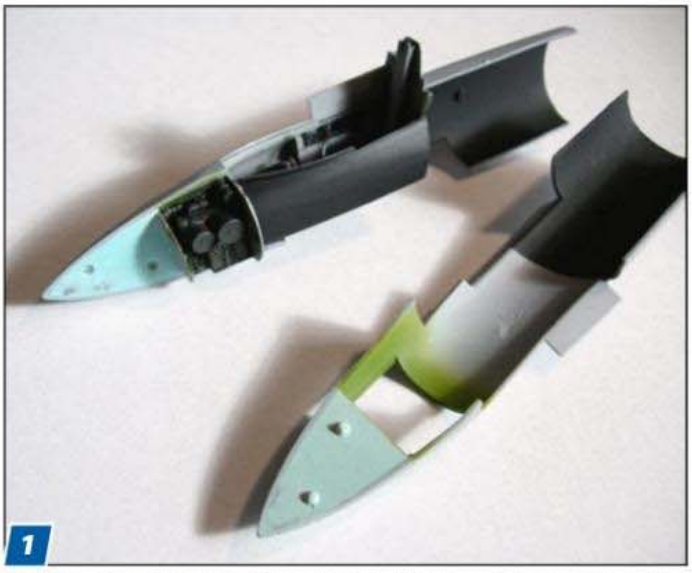
A build for hire pushes a modeler higher

MODEL BY JOHN FOX

In 1949, the U.S. Navy awarded McDonnell Aircraft Corp. a contract to produce a carrier-based, jet-powered, all-weather interceptor designed to succeed the F2H Banshee. The F3H was powered by a Westinghouse J40 engine, but disappointing performance led to a redesign featuring a J71 engine. Still, the subsonic fighter fell short of expectations. It was eventually supplanted by the F-4 Phantom.

Describing how he confronted his own Demon, modeler John Fox wrote, "When a client in the Netherlands contracted me to model an F3H-2 Demon, I found I would be building AZ Model's 1/48 scale kit (No. 4816, a rebox of the Grand Phoenix kit). For me, it was a tale of two builds: injection-molded plastic and resin details. My client wanted to see his Demon with open access panels and folded wings; this required Aires aftermarket detail sets and a good deal of scratchbuilding.

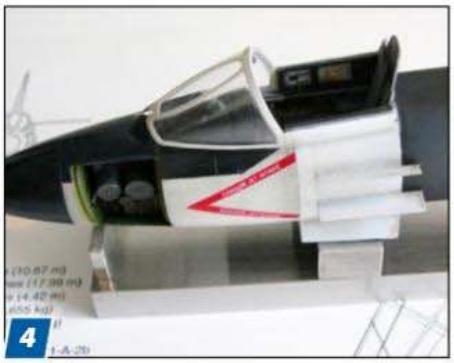
"Because the Demon was much larger than I had expected, I decided to build it in sections (although the nose section with cockpit would have been separate anyway). I was going to have to fit an electronics bay, nose wheel well, cockpit tub, and two large gun bays, all in a very small space."



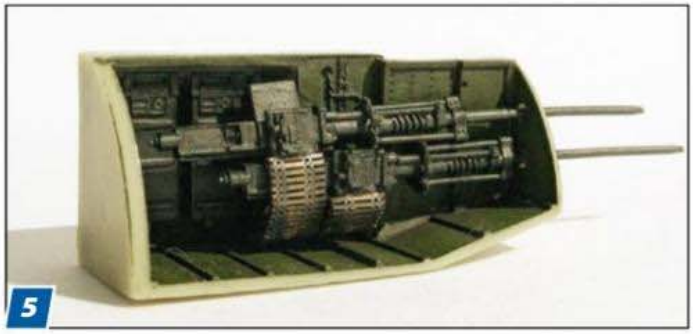
Knowing he would be pouring added details into open compartments, John made doubly sure the nose was weighted and aligned. He poured lead shot into the starboard nose section, covered it with Bondo and, before it hardened, squeezed it flat against a smooth metal 1-2-3 block and removed the excess. After it cured, he created two dimples with a burr bit in a motor tool. Then he filled the port nose half with lead shot, covered it with Bondo, applied paste wax to the starboard section as a release barrier, and pressed the port section against it. When the Bondo began to set, he trimmed away excess and parted the halves, having created locators that would ensure alignment when he was ready to mate the fuselage.

Then he could continue superdetailing, packing in detail with the added confidence it would all fit into the nose later. Here, an Aires ejection seat …

… and here, Aires' resin electronics bay, resting on the 1-2-3 block he used to press Bondo into the nose. The metal block is a machinist's tool, 1 inch x 2 inches x 3 inches (hence its name).



John finished the nose separately — paint, decals, and all. He replaced the kit-supplied air-intake dividers with .010-inch styrene sheet that looked closer to scale.



John put so much detail in the gun bays that they didn't fit properly; he shaved them after they were built.

The client wanted folding wings, so the client got folding wings. John estimates the entire wing mechanism comprises about 100 pieces.

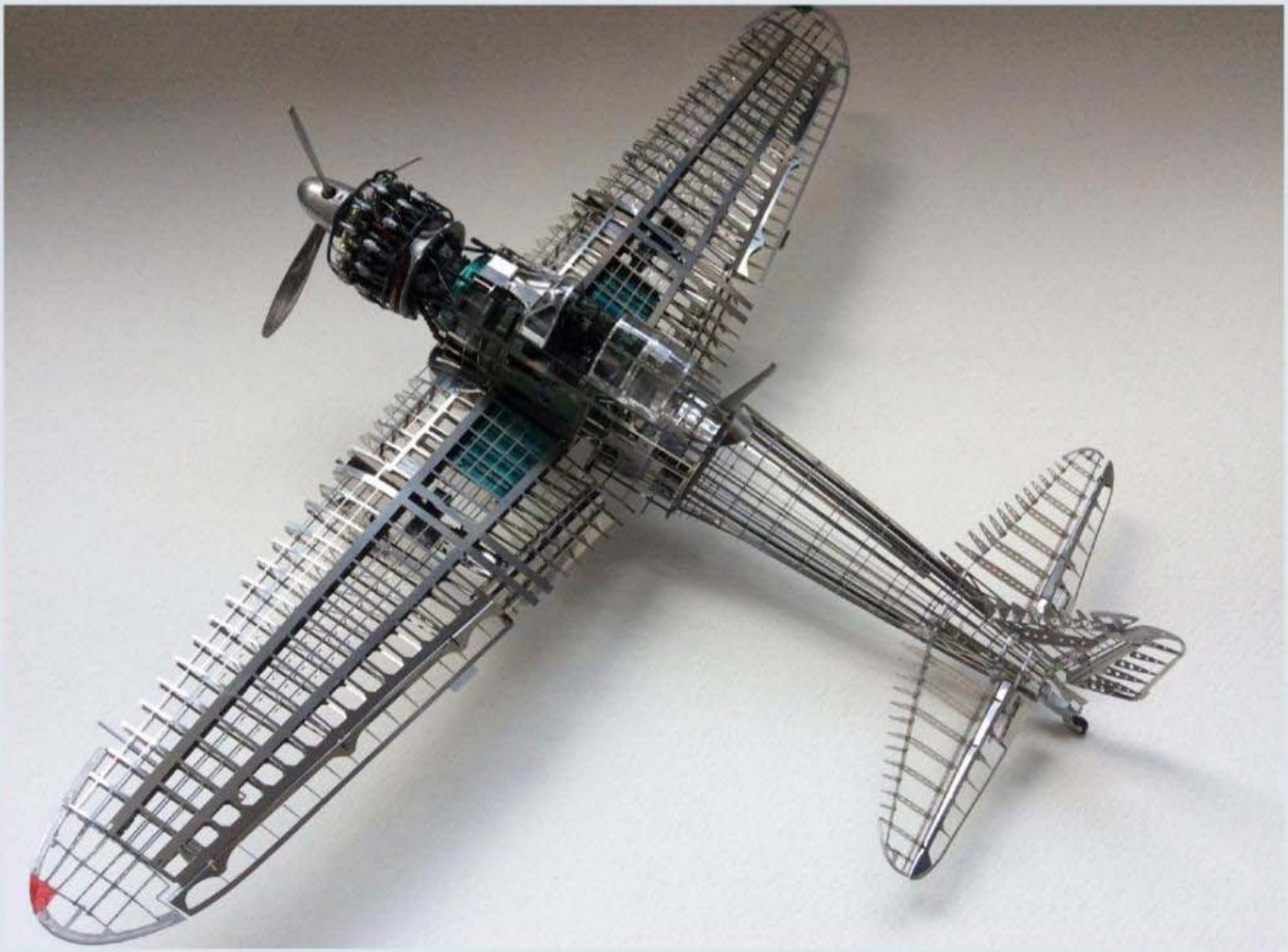
John completed the wings off the model, making details and painting much easier. He kept them removable for shipping.

Resin wheel wells required trimming, trial, error, and more trimming to avoid interference with the wing fold. **FSM**

▲ THOMAS CHAMBERLAIN
GAINESVILLE, FLORIDA
When Monogram's reissue of Aurora's 1/8 scale Creature from the Black Lagoon surfaced on Thomas' workbench, he airbrushed it with Testors Model Master enamels and bulked up the kit's base with his own wood pedestal, giving the scary manphibian a touch of class.

▲ JOE MARTINEZ
SACRAMENTO, CALIFORNIA
Cowabunga! Mad Lab Models' 9-inch-tall resin *Bart 'N. Stein* had two right hands, so Joe amputated them, filed off the stitches in the resin casting, and replaced them with fine black wire. Remounted hands are held in place by magnets, as is the figure on the base.

▶ MASON DOUPNIK
CORONA, CALIFORNIA
Combining 1/48 scale Academy/Minicraft and Italeri kits with Eduard photo-etch and a resin conversion set from Cobra Company, Mason modeled the MH-60 *Lady Godiva*. He built it for the pilot of a daring rescue by the 160th Regiment during Desert Storm; the pilot requested the name be put on the cowling, even though it wasn't on the real chopper.



▲ BRIAN COLTON
URAIDLA, SOUTH AUSTRALIA, AUSTRALIA
No Halloween gallery is complete without at least one skeleton. This one is a 1/32 scale "Fine Structure" Mitsubishi Zero by Imcth. It's mostly photo-etched stainless steel; engine, cockpit detail, weapons, and landing gear are white metal. Everything is joined with super glue.

◀ RON CRAMER
SEVIERVILLE, TENNESSEE
Stationed at Guantanamo Bay, Ron passed the time weathering Revell's 1/35 scale Horch German command car, distressing the paint with the salt technique to make it look like it belonged to the Afrika Korps. He left out the passenger seat and added a radio and machine gun.

▲ PAUL MEIER
EL PASO, ILLINOIS
Paul writes, "My uncle, 1st Lt. John W. Hahn, flew the P-47 depicted here during World War II with the 316th Fighter Squadron of the 324th Fighter Group, 12th Air Force, providing close air support for the U.S. 7th Army." His friend Chuck Pomazal helped him design decals for the markings to decorate Trumpeter's 1/32 scale "Jug." Paul says, "Chuck deserves as much credit for this as I, since without the graphics I would have built just another P-47." The base is model railroad groundwork.

◀ JOHN EATON
WOODLAND, CALIFORNIA
John painted Nitto's 1/100 scale Boeing 727 with three coats of Testors Model Master flat white and a thin coat of Testors gloss white, allowing several days between each coat. Leading edges and inlets are Alclad II polished aluminum; John cut up photo-etch scraps for blade antennas. He laser-printed his own decals and applied Pledge FloorCare Multi-Surface Finish.

▶ JOHN TOKAREWICH
BARTLETT, ILLINOIS
Departing from his usual 1/48 and 1/32 scale aircraft, John built Sword's 1/72 scale F2H-2P reconnaissance Banshee to honor a friend's father who flew with VMJ-1 in Korea. John worked around missing gear supports, poor fits at the wings and nose, and, he says, "the decals were incomplete or incorrect compared to historical photos." He finished with Testors Model Master acrylics and enamels.

Landing a better Eagle

Building MPC's big *Space: 1999* transporter /// BY JAY CHLADEK

Premiering in 1975, *Space: 1999* was a live-action drama produced by Gerry and Sylvia Anderson, a couple best-known for a string of successful science-fiction marionette TV shows like *Stingray*, *Thunderbirds*, and *Captain Scarlet*. Running just two seasons, *Space: 1999* centered on the experiences of the 300-strong crew of Moonbase Alpha hurtling across the universe after the moon was ejected from Earth's orbit by the explosion of nuclear waste on the opposite side of the satellite. Dodgy concept notwithstanding, the show resonated with audiences and became a cult hit.

High production values more at home on the big screen helped drive the fandom. The show's technology and designs seemed grounded in reality. Epitomizing those aesthetics was what many fans consider the real star of the show: the Eagle Transporter. The bug-shaped craft combines the design sensibilities of the Apollo program and a Sikorsky Skycrane helicopter, with a sprinkling of *2001: A Space Odyssey* DNA.

Filming miniatures

The show's effects team used Eagle miniatures sized at 44, 22, and 11 inches. The largest appeared in most scenes, with the smaller versions used for distant shots and for showing multiple Eagles in forced-perspective views. Initially, a single 44-inch Eagle was available, but a second and third were built. Due to budget constraints, there were no dedicated stunt or pyrotechnic models. If a script called for a crash, one of the 44-inch models took the fall and, although robust by model standards, they weren't immune to damage. As a result, each underwent multiple rebuilds, repaints, and minor detail changes over the series' two seasons. All survived, and today they can be found in private collections.

In 2015, Round 2 Models, which owns the MPC brand, released an all-new 22-inch Eagle. Combining old-school research and modern CAD technology, the kit is a faithful half-size reproduction of the first 44-inch studio model as it appeared during the first season.

Having built one straight from the box, I wanted to build one representative of a second-season ship. I planned to pay homage to the originals without necessarily replicating a specific studio model, and to provide ideas of what could be done with the model.

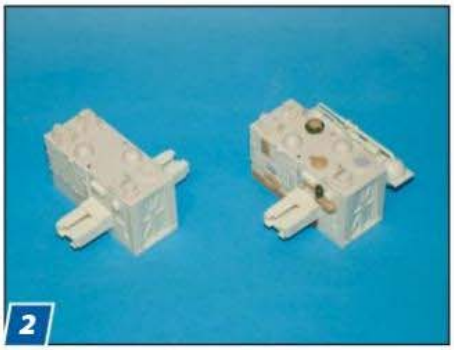
Adding greeblies

The passageways that join the nose cone and engine section to the interchangeable pod must be built before the cages that surround them. MPC did a terrific job replicating the initial studio model here, and several model parts used in its construction are recognizable. They include Tamiya Sheridan and Panther engine decks and a plethora of lunar module halves from Airfix's Saturn V.

During second-season rebuilds, passageway details changed. This offers a great opportunity to personalize your Eagle.

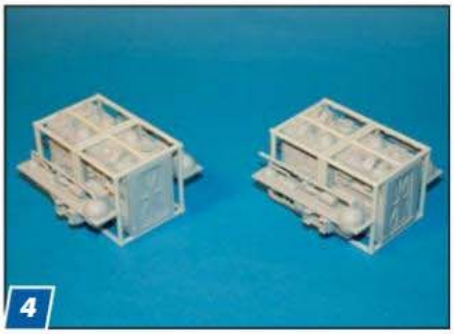
I don't know who coined the term *gree-*

Revell's 1/72 scale Tiger and Airfix's 1/76 scale Panzer IV sacrificed parts to update the Eagle for the second season.

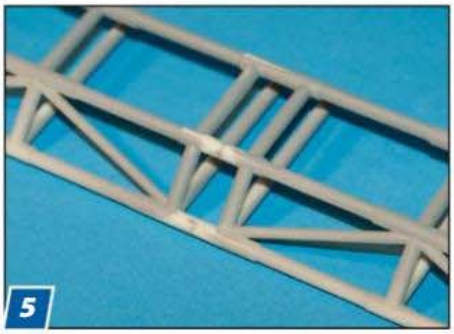


Exhaust stacks, jerry cans, hatches, and road wheels all add excellent surface detail. I didn't go overboard because I wanted to show an Eagle with some customization and retrofitting by a resourceful maintenance staff cut off from planet Earth.

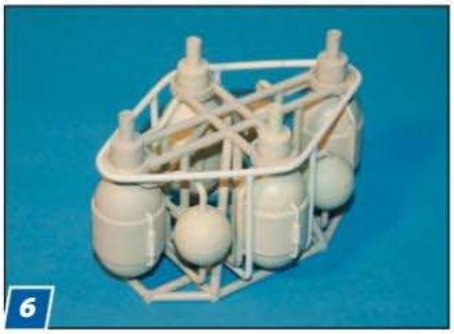
I sanded as many of the cage seams as I could while the parts were still attached to the trees, but additional sanding was needed to remove thick sprue gates and seams I couldn't get to earlier. Primer revealed areas still in need of attention.



Constantly check the fit of the cages and passageways to ensure everything that needs to be filled gets filled and everything fits just right.



I joined the spine's side panels and cleaned up the center seam. Then I added the crossbeams, starting with the ends and center. Regular test-fitting and alignment checks kept the structure square. With plastic-welding glues, parts can be adjusted while the plastic is soft.



I used super glue to attach the loop pipe to the engine-bell support section since, even after bending, styrene tube still wants to straighten out. To join the two ends of the loop, I inserted steel wire as a spine and to provide more gluing surface.

blie, but the idea is simple — glue interesting shapes (greeblies) to a model to add visual interest to the surface.

Now, not just any old parts will do — there is a method to the madness. In the 1970s, 1/35 scale tank and 1/72 scale aircraft kits provided many greeblies. With the 22-inch model being exactly half the size of the original miniatures, I sourced parts from 1/72 and 1/144 scale kits, ***1***. The aim was to give the impression of details rather than trying to add every specific feature found in photos, ***2***.

Cage match

The cages and spine required the most work to remove mold seams and ejector-pin marks, ***3***. After scraping with a hobby knife, I used sanding blocks of different grits, sanding sticks, needle files, and several grits of sandpaper, from 220 to 600, cut into small squares, to smooth the surfaces. The work may seem endless, but time spent here results in a better-looking model.

Test-fit the cages around the passageways to ensure alignment of the new greeblies and identify areas that might need filling and cleanup, ***4***. I sprayed the passageways with gray primer and added the cages before applying the body color. Partially covered gray hints at shadows.

Pay attention to the instructions when assembling the spine, ***5***. The beams between the sides of the spine fit in only one direction — if you get one upside down, it will throw everything off.

The engine section

Take care building the engine section; a lot of parts and pipes need to fit exactly. Assembled, the section is a work of art.

For the second season, the effects team added a loop pipe around the main engine bells that carried a gas (probably Freon) to the engine bells to simulate exhaust. The same pipe, albeit nonoperational, was later fitted to the other 44-inch models.

I carefully bent 3⁄32-inch-diameter styrene tube to fit around the base of the engine bells, ***6***.

Next, I made two U-shaped pipes, also from 3⁄32-inch tube, and installed them between the fuel tanks. A round file produced a curve at the ends for a flush fit, ***7***.

The landing gear

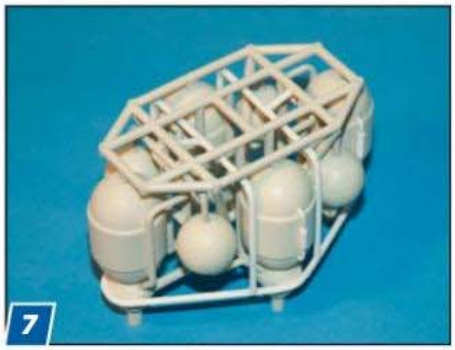
The multipiece pods are mirrored, port to starboard, so I labeled them to avoid confusion. Minor gaps between panels needed filling and sanding.

The Eagle kit comes with springs for the landing-gear struts, but they are stiff and the model sits too high if they are used as is. To reduce the height, I added 3⁄16-inch (4.6mm) bump stops to the roof with laminated styrene strip, ***8***. No matter how much weight is added, the model sits level — you can even omit the springs.

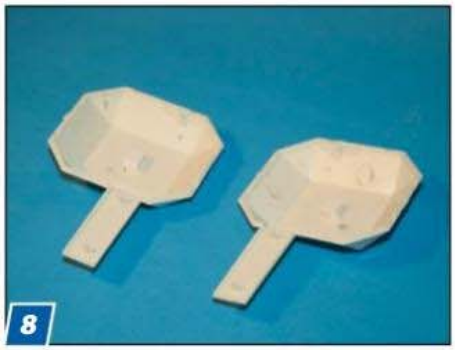
If you want your Eagle to have a little spring in its step, here's a solution: Cut each spring in half, then rejoin them using heat-shrink tubing, ***9***. Now the springs can be adjusted by simply screwing them up or down.

The transport pod

Deceptively simple, the pod comprises several pieces with seams that require filling.



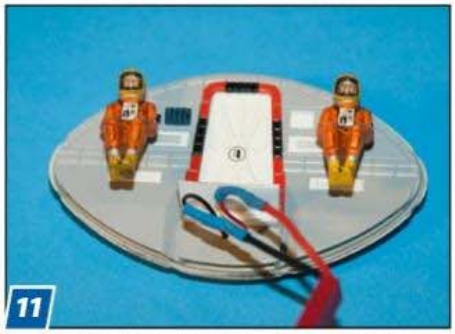
For a final touch, I added external resistor-like details to the tops of two of the fuel tanks. Those were made with Plastruct 1/16-inch plastic-coated wire and 3/32-inch styrene tubing.



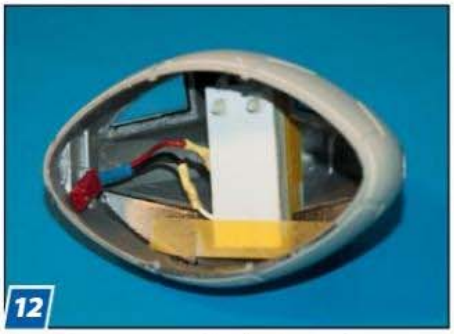
The laminated plastic stops don't look pretty, but they limit the leg struts' travel and keep the ship sitting right.

Forget hydraulic lifters — you can alter the stance of an Eagle with heat-shrink tubing.

The kit keeps the command module simple because there's not much to be seen through the windshields. The dark circles are magnets fitted to keep the rear panel removable.



Once painted, the figures look every bit like Moonbase Alpha pilots. MPC provides decals for arm patches and chest-pack details.



Sheet styrene covers the battery and serves as a mount for a pair of LEDs in the center of the module. Tape holds the cover in place so it can be easily removed to change the CR123A cell.

The pod attaches to the spine with two small self-tapping screws through holes in the spine and top plate. The flanges on the pod's end plates interfere with the holes, so I opened them with a drill bit in a pin vise.

To match the studio model, paint the inside of the pod windows black before installation.

The nose

The command module consists of upper and lower halves, a back wall, and interior parts, ***10***.

The cockpit windows are slightly too large for the openings. I carefully sanded the edges to improve the fit. Thankfully, if you mess up a window, just use it for the lower openings — those are blacked out.

The rudimentary interior features a detailed back wall and two pilots that are half-size copies of the astronauts from Revell's 1/24 Gemini spacecraft which were used to crew the 44-inch studio models, ***11***. No front instrument panels or floor are provided, but not much can be seen through the cockpit windows.

Lighting the Eagle

The kit's size makes the Eagle a good subject to light, although lights weren't used much on the studio models. The only area regularly lit was the cockpit, and it's easy to replicate that effect with a couple of white LEDs, a power source, switch, and a soldering iron.

To prevent light leaks, I sprayed the inside of the command module with several layers of Tamiya silver leaf. The metallic surfaces reflect and diffuse the light. To check for light leaks, shine a bright LED flashlight through the plastic; if you see glowing spots, mark them and repaint.

The nose attaches to the frame with magnets for easy access to a switch hidden in the rear panel.

In the center of the module, I built a styrene box to contain a pair of soft-white LEDs and a CR123A 3-volt lithium battery for power, ***12***. I wired the LEDs in parallel, soldering each positive and negative to wires from each battery terminal. The switch is mounted in line, ***13***.

Attaching the command module to the rest of the Eagle with magnets means you can remove only that section to service the lighting circuit. I mounted round 1/8- x 1/32-inch rare-earth magnets in the base plate of the front passageway and the rear of the nose, using the locating tabs to align corresponding holes, ***14***.

Eagle coloring

I base-coated the model with Tamiya gray primer spray paint, which exposes flaws and even fills minor ones. Spray thin layers to avoid covering fine details. As a bonus, Tamiya gray primer matches the gear-strut color of the Eagle.

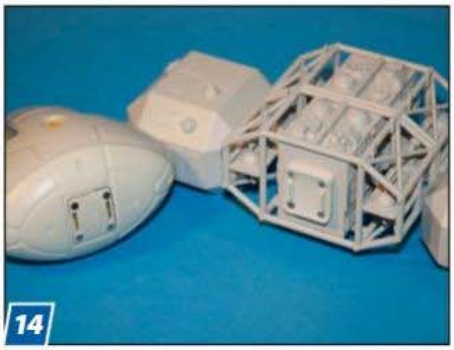
Access to the studio models reveals that the closest match to the body color is Ford diamond white, a warm off-white automotive paint. Made by Ford Europe, the shade is widely available in the UK and Europe but harder to get in the U.S.

MPC molded the parts in an approximation of the color, and I've found two close matches. If you are airbrushing, mix 7 parts Testors Model Master camouflage gray and 3 parts white. (Currently, camouflage gray is only available as an acrylic in bottle form, but you may be able to find older bottles of the discontinued enamel or decant it from a spray can.) If you prefer a spray can, try Tamiya U.S. Navy insignia white (AS-20); despite the name, it's actually a light gray.

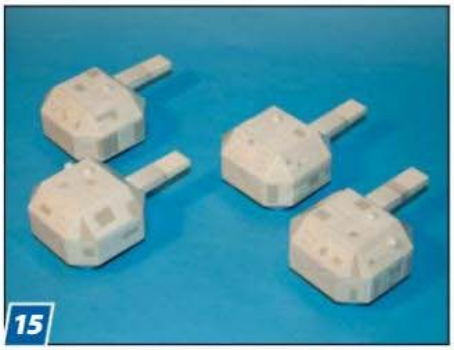
Detail painting

The 44-inch Eagles underwent extensive repaints after episodes involving crashes. During the first season, the first studio

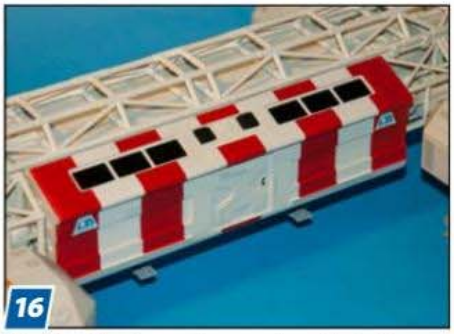
With the switch wired in, I tested the lights before moving forward.



I super glued the magnets into holes on the command module and front passageway. After drilling pilot holes with a bit in a pin vise, I reamed them out to the proper diameter with a hobby knife.



My masking tools of choice are yellow, rice-paper-based tapes from Tamiya and Aizu. The former is available in dispensers that protect the edges from dust.



Masking the stripes from each end into the center puts the shortfall on the center stripe; it won't be noticeable if the other stripes are equal.

When does plastic look like metal? When it's been painted with Alclad II polished aluminum. The one on the left is the plastic kit part; on the right is actual aluminum.

The kit's large decal sheet includes major markings like the antiglare panels and a bunch of smaller stencils, shapes, and graphics for even more customization.

model wore three distinct schemes. Early on, the model was mostly uniform, with little contrast on panels except for some light airbrush overspray. Prior to the 17th episode, "The Last Sunset," the first model was repainted with light azure blue accent panels. A little later, they were repainted in medium gray to match those applied to the second studio model.

In keeping with my intention to build an Eagle from the second season, I dry-brushed flat white over the light gray base coat. This produced a sandblasted appearance, as if the ship had flown through lunar dust and alien atmospheres. I masked many panels on the leg pods and airbrushed them warm gray, ***15***. To duplicate the appearance of the passenger pod on the second 44-inch model, I airbrushed a darker gray over some of the masked panels. I limited washes to deeply recessed detail, but applied additional dry-brushing to the feet to replicate a layer of moon dust.

Rescue stripes

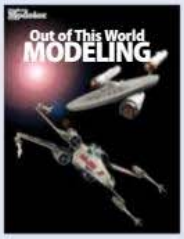
The most distinctive Eagles are those carrying a red-and-white striped rescue pod. If you plan to build a rescue Eagle, careful masking and paint selection is the key. The alternating stripes are the same width, and there are nine stripes on the pod. Dividing the length of the pod by nine gives stripes about 21.6mm wide, which I rounded to 22mm. They are easily masked with Tamiya and Aizu tapes available in metric widths, ***16***.

Engine bells

The kit comes with well-molded plastic engine bells for the main motors and VTOL jets. Knowing some modelers prefer real aluminum to paint, Round 2 issued two aftermarket aluminum engine bell kits. One contains the main engines, VTOL thrusters, and gear struts for the landing pods. The other set features reaction-control thruster bells for the leg pods. Both sets are designed to drop into place, and they integrate beautifully with the model.

But it's possible to get great results with paint as well, namely Alclad II polished aluminum over a base coat of Tamiya gloss black spray paint. I followed the instructions and airbrushed the metallic paint at 12-15 psi, building up the color in thin layers, ***17***.

Like this story?



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Decals and final assembly

Prior to decaling, I sprayed the Eagle with Tamiya clear gloss.

For those who don't wish to paint the black areas on the nose or the leg pods, decals are provided. I painted the black on the command module but used the leg-pod crosses, ***18***.

Many of the stencils on the sheet are based on Letraset architectural graphics (used on building plans in the mid-1970s). The studio Eagles used a lot of these, and there are variations between repaints; you don't have to use all of them.

Once the decals were on the model, I sprayed the subassemblies (except the engine bells) with clear flat.

The parts can be brought together now. The kit's modular construction allows some parts, such as the landing gear pods, to be left unglued.

My Eagles can be partially disassembled for transport and storage, and, for added fun, components can be swapped between them according to mission requirements. **FSM**

By Mark Hembree

Parts prep 101

A model is only as good as its pieces

Eduard's 1/48 scale X-1 Mach Buster is not a complex build. Proper parts preparation and basic techniques will easily yield a good-looking model.

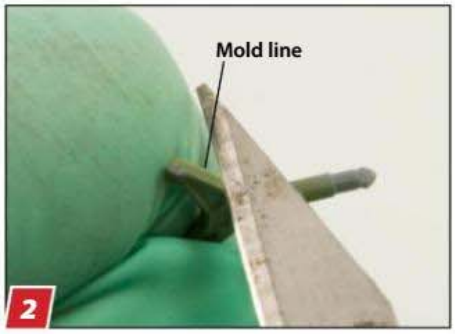
Great models often exhibit great skills. Not many can scratchbuild a .50-caliber ammo belt in 1/48 scale and make it look good.

But, more often, great models are based on a consistent application of good, basic techniques easily within reach of beginners and intermediates as well. And that begins with taking time to prepare each part: removing flash (excess plastic) and mold seams, filling ejector-pin marks, smoothing rough edges, and making sure the part is clean before you attach it so glue and paint adhere as they should.

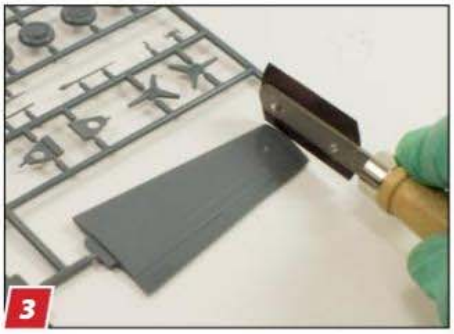
So, to build better models, the best place to begin — as usual, for almost everything — is at the beginning. Start by washing all the parts in warm, soapy water. Rinse thoroughly and let them air-dry.

Now, let's prep those parts!

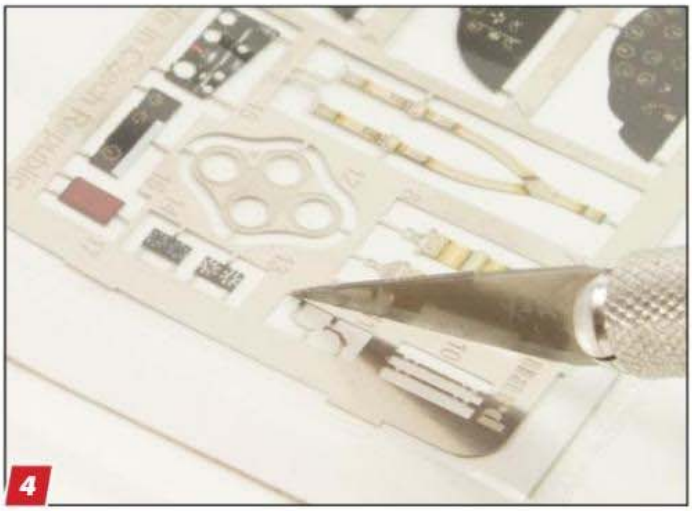
Don't twist parts off the sprue. Clip as close as you can without damaging the part. Xuron sprue cutters are available from *FSM*: Visit Kalmbachhobbystore.com/Modeling Tools.



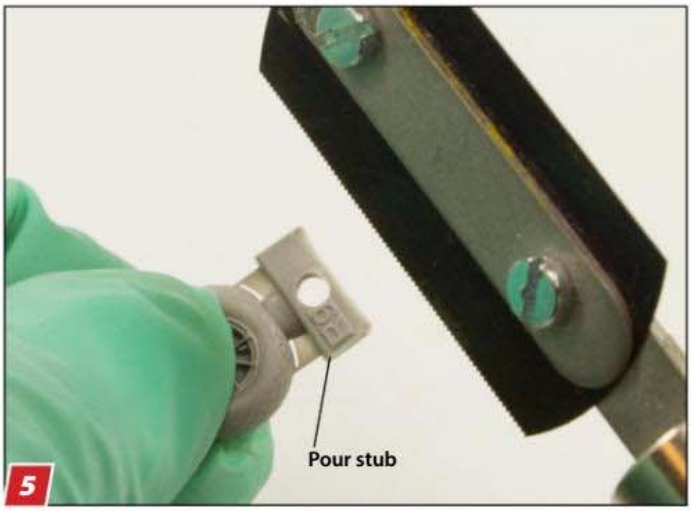
Mold lines are usually easily removed by dragging a hobby knife across them. Be careful not to take a divot or damage the part; sand and smooth if necessary.



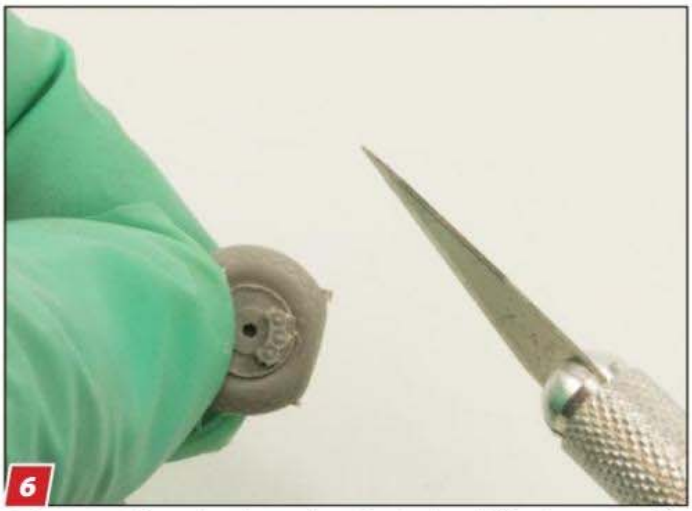
For thicker sprue attachments and for prominent parts (like wingtips), a fine saw may be better for precisely parting a piece from the sprue and avoiding damage.



Cut photo-etched parts loose with a hobby knife (not your good clippers). Clip as closely as you can, but be careful — they are naturally springy and elusive. For tiny parts, I leave the fret in the bag and cut through the plastic so when they come loose, they're still in the bag.



Resin parts often are attached to a pour stub. A fine saw (mine is from UMM-USA) is the best way to detach the stub.



Trying to avoid marring the tread on the tire, I carefully trim excess with a hobby knife …

… before finally smoothing with a few swipes of a sanding stick. Squadron has handy sticks comprising three grades of grit, sufficient for all but the finest finishing.

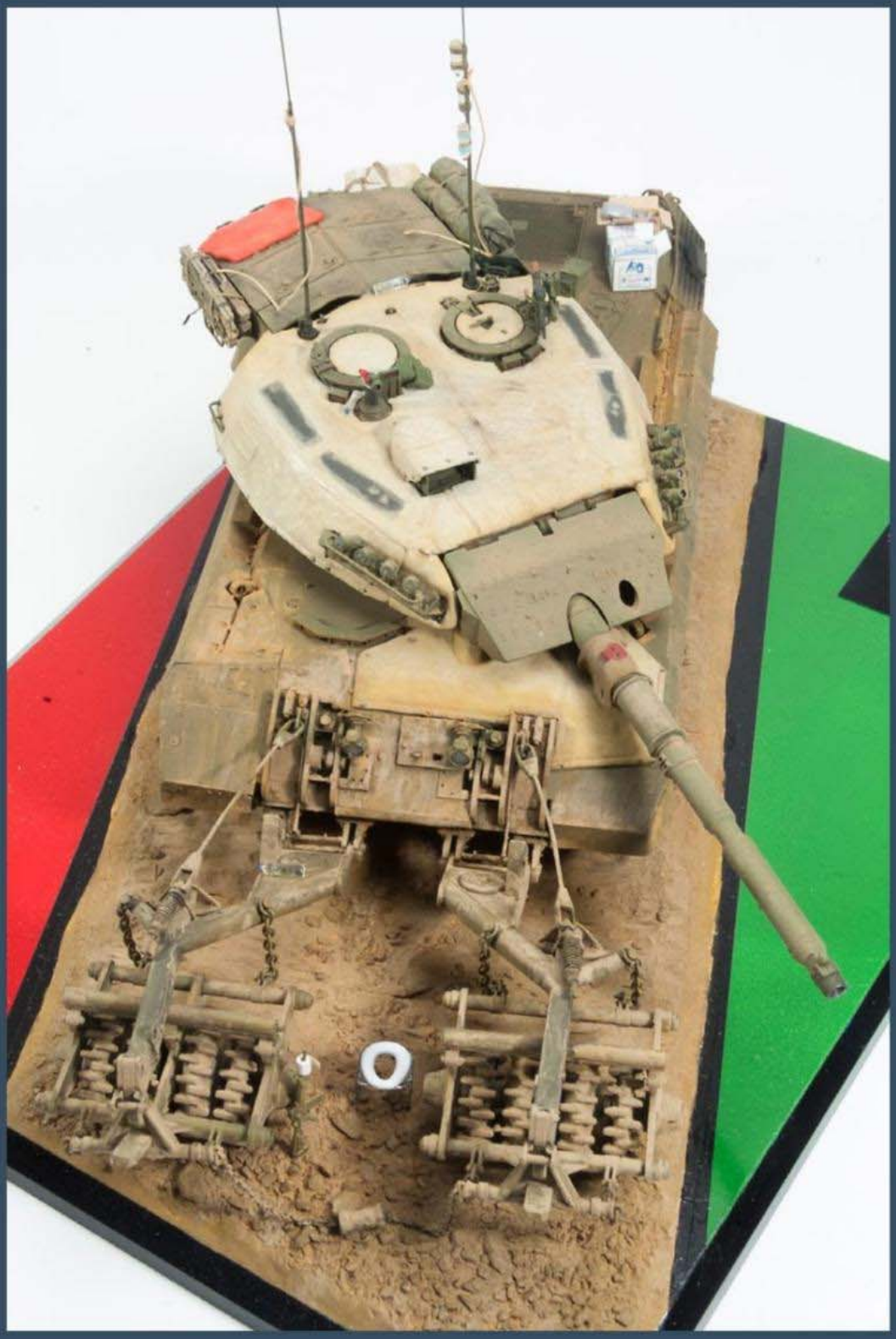
After the resin castings are cut loose and smoothed, soak them in Westley's Bleche-Wite to remove oils and casting residue that can hinder paint and adhesives.

A fine saw is the best way to detach clear parts from a sprue. Clippers may stretch the plastic, and a stress mark in clear plastic is impossible to repair or remove. **FSM**

AMPS 2017

In April, Danbury, Conn., played host to the annual convention of the Armor Modeling and Preservation Society. Hundreds of scale tanks, armored, cars, figures, and vignettes graced the tables in the contest room. *FineScale Modeler* editors Mark Savage and Aaron Skinner traveled east to photograph some of them.

The 2018 AMPS International Convention is scheduled for May 3-5 at the Hope Hotel and Richard C. Holbrooke Conference Center in Dayton, Ohio. More info: www.amps-armor.org.



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▶ ALLAN CROWTHER
DARTMOUTH, NOVA SCOTIA, CANADA
To model a typical late Canadian mine-roller from Lord Strathcona's Horse in Afghanistan, Allan dressed up Takom's 1/35 scale Leopard C2 MEXAS with Legend's resin updates and scratchbuilt antennas and a mine-roller mounting bra. Thermal blankets made from epoxy putty completed the transformation. He painted the tank with Tamiya and Vallejo acrylics and weathered it with Vallejo washes and Bragdon powders.

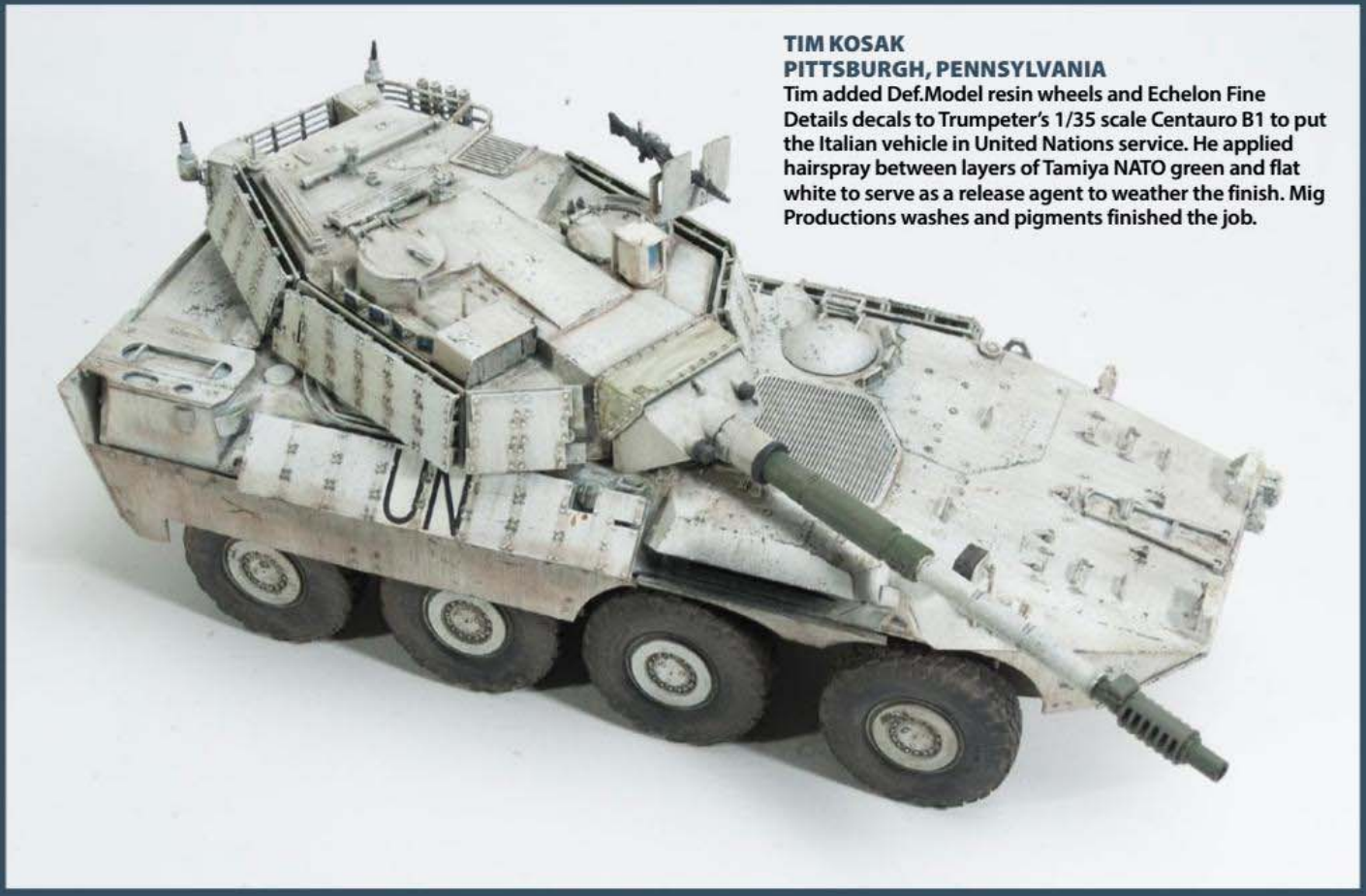
▲ CHUCK ALESHIRE
SHOREWOOD, ILLINOIS
Chuck built one of Deutsche Afrika Korps' first Tigers meeting a local during a road march in Tunisia. Detailing Dragon's 1/35 scale kit, he wired the smoke dischargers and modified the tow cables before painting it with Tamiya acrylics.

◀ RICHARD R. FISHER
TULSA, OKLAHOMA
When U.S. Marines went ashore at Tarawa in November 1943, *China Gal* was one of the few M4A2s to make it off the beach. Richard's improvements to Dragon's 1/35 scale Sherman include: corrected running gear and suspension; resin tools and a turned-metal barrel; casting texture and marks on the turret and transmission; thinned brush guards; plugged headlight mounts; and wired taillights. He painted the tank with Floquil enamels.

▶ CHRIS GRAETER
COLCHESTER, VERMONT
Chris' 1/35 scale FV107 Scimitar looks sharp with AFV Club individual-link tracks, brass wire antennas, and colored plastic lenses for the optics on the turret. He painted the AFV Club kit with Tamiya acrylics over Tamiya gray primer; AK Interactive dark brown wash emphasized panel lines and pigments from Ammo of Mig Jimenez; and AK Interactive picked out details. Sandy groundwork puts the British vehicle in the 1991 Gulf War.

ROBERT MAGINA
PLAINVILLE, MASSACHUSETTS

Scratchbuilt armor plates offer Tamiya's 1/35 scale Jeep little protection from the cold in Robert's Ardennes vignette. Other additions to the vehicle include Tank Workshop resin wheels with snow chains and M.V. Products lenses for the headlights. Robert painted the vehicle with Testors Model Master enamels over a flat black base coat. The groundwork is vinyl spackle with Hudson & Allen snow and a scratchbuilt signpost.



TIM KOSAK
PITTSBURGH, PENNSYLVANIA

Tim added Def.Model resin wheels and Echelon Fine Details decals to Trumpeter's 1/35 scale Centauro B1 to put the Italian vehicle in United Nations service. He applied hairspray between layers of Tamiya NATO green and flat white to serve as a release agent to weather the finish. Mig Productions washes and pigments finished the job.

MARC BOURQUE
BEDFORD, NOVA SCOTIA, CANADA
Marc spent three months detailing Tamiya's 20-year-old 1/35 scale SdKfz 124 Wespe with Friulmodel metal tracks, an Armo turned-metal barrel for the leFH 18 howitzer, and a bunch of scratchbuilt features. He airbrushed the camouflage freehand over dark brown primer and weathered the German self-propelled gun with artist's oil washes, filters, and pastel dust.

▲ DANA SMITH
WEAVERVILLE, NORTH CAROLINA
While working on HobbyBoss' 1/35 scale AT-1, Dana dropped it. Making the best of the disaster, he finished the model as a prototype Soviet self-propelled gun abandoned during construction. After priming the vehicle, Dana airbrushed it with True-Earth SDW Russian green and applied a filter of SDW buff thinned with water. Four shades of rust weathered the tracks.

▲ BRETT AVANTS
ST. CHARLES, MISSOURI
A snap-together Volkswagen is no match for Nitto's 1/20 scale SF3D Krote in Brett's diorama. He detailed the mecha with wire handles, brush guards, and antenna, and added real springs to the legs' hydraulics. Vallejo and Ammo of Mig Jimenez acrylics colored the machine.

▲ PAUL HELFRICH
DAYTON, OHIO
Paul built Italeri's 1/35 scale U.S. Marines Sherman out of the box and posed it storming a beach made from clay, Celluclay, Mod Podge, and Pledge FloorCare Multi-Surface Finish. He painted the tank with Vallejo's olive drab modulation set and weathered it with washes and pastels.

▼ BILL SCHMIDT
ANSONIA, CONNECTICUT
A Polish 152mm ShKH DANA prepares to move to a new firing position in Bill's 1/35 scale scene. He added E.T. Model photo-etch and weighted resin wheels to HobbyBoss' kit before painting the self-propelled gun with Tamiya acrylics.

▲ DAN EGAN
ALBANY, NEW YORK
During the early 1930s, China bought several Vickers-Carden-Loyd A4E12 light amphibious tanks. Dan built one from Combat Armour Models' 1/35 scale kit, masking and painting the camouflage with Tamiya acrylics; Mig Productions enamels provided washes and shading.

◀ DANA SADARANANDA
CAMP HILL, PENNSYLVANIA
To model a tank typical of those used in Syria and Iraq, Dana built Trumpeter's 1/35 scale T-62 ERA Mod. 1962, plumbing the fender-mounted fuel tanks with copper wire. After pre-shading the model with black and white to provide contrast, he camouflaged the tank with desert yellow mixed from Tamiya acrylics.

▶ KEITH E. TOUCHETTE
HUDSON, NEW HAMPSHIRE
For context, Keith surrounded AFV Club's 1/35 scale M2A1 105mm howitzer with Royal Model resin ammunition crates and AFV Club turned-brass rounds. He airbrushed a base coat of Tamiya olive drab, then dry-brushed the artillery piece with Testors Model Master faded olive drab before adding AK Interactive pigments.

Little details for a GIANT TANK

In 1/35 scale, a T-35 is nearly a foot long!

BY ROBERT SHVEYTSER

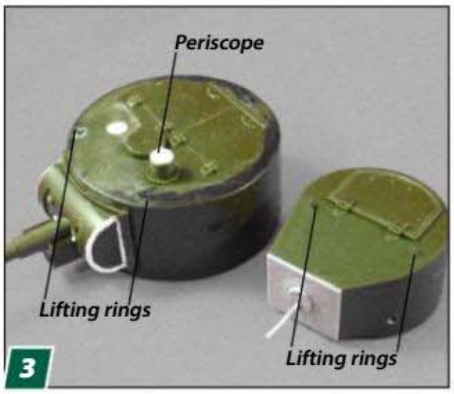
Inspired by the British tank Independent, the Soviet T-35 was the only five-turret tank ever mass-produced — and the largest tank the USSR ever built. It weighed 45 tons, carried a crew of 11, and was as unwieldy and awkward in the field as it was impressive on parade.

The T-35 was developed in the early 1930s and produced from 1933-39, seeing some fighting early in World War II, reportedly including the battle for Moscow. But the Bolshevik Factory's behemoth was ill suited to fight the better tanks of its day. A later model, "T-35A 1939," had conical turrets and other noticeable differences, as well as thicker armor, but the tank remained slow (30 kmph/19 mph) and its armament ineffective. No matter: Most of the 63 tanks produced (including both types and two prototypes) were lost to mechanical failures. One example survives today, displayed at the Kubinka museum just outside Moscow.

ICM's 1/35 scale kit (No. 35041) is well detailed and provides a convincing replica — but it also has many aspects that can be improved. I wanted to portray a tank that had been in service for several years prior to and during the war.

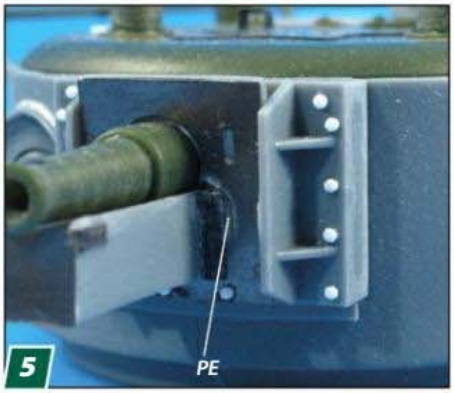
I joined Friulmodel metal tracks with heavier wire than provided; it's easier to insert without bending and won't stretch into an unwanted sag. I did have to drill out the holes in each link to fit the wire — 130 links per side.

After soaking in vinegar, tracks were washed and given a Blacken-It bath for about two minutes, then rinsed and air-dried. Cutting artist's oils with turpentine, I applied burnt sienna mixed with red, then a thinner wash of black and green. When dry, the tracks got a light coat of pigments. An artist's pencil darkened areas of road-wheel contact. Finally, I blended with a paper stick and lightly scrubbed the high points to show bare metal.



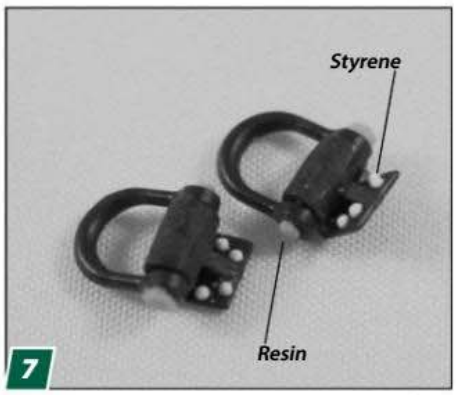
The machine-gun and 45mm turrets received photo-etched (PE) lifting rings. I added bolt detail with slices of styrene rod and used putty for a weld bead. To correct the periscopes, I sliced off the top half, glued on a styrene disc, and sanded it flush. A small styrene square glued to the top finished the shape.

On the main turret, I moved the front antenna supports farther forward, sanding down their mounts and using thin strips of foil to create new attachment points. A flange on the loader's hatch cover was flattened and PE and styrene bits were added to the machine-gun mount.



I added styrene bolt detail and PE parts to the mantlet.

I opened the pistol ports; the periscopes are revised as before. I added two oval strips of sheet styrene — I don't know what they were, but references show them — and a weld bead around the machine gun housing. I also bored the 76.2mm gun barrel. The raised star on the roof is PE.



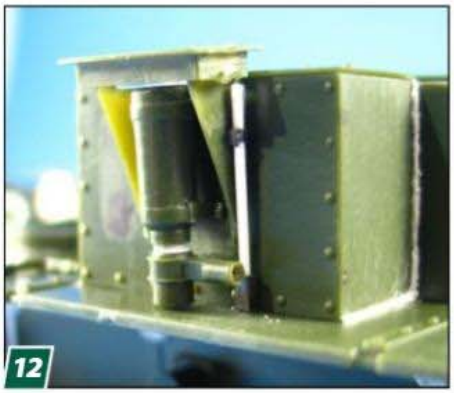
I detailed towing shackles with resin bolts from Verlinden as well as rivets made from styrene rod.

The glacis plate is bordered by weld beads made from putty.

Headlight covers were detailed with PE and given flanges along the bottom. They also received styrene brackets as well as wing nuts from Bronco.

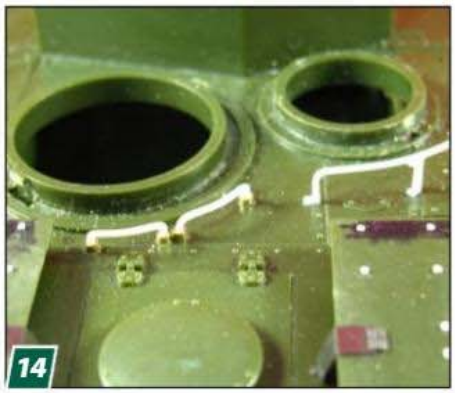
Areas underneath the small turrets had semicircular openings visible from outside; I closed these off with styrene sheet.

I replaced the kit's towing cable with metal from Aber, using aluminum foil for the sheath and PE for mounting brackets.

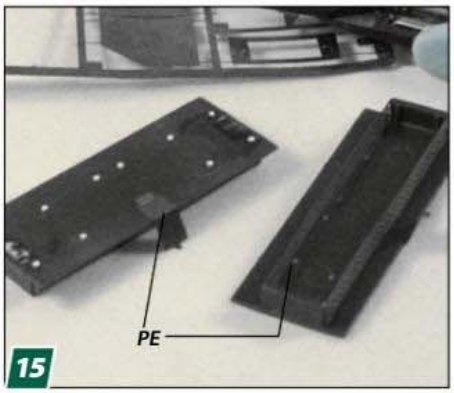


Hydraulic jack assemblies were detailed with styrene bits and PE. I drilled out the jack handles and added putty weld beads in the area.

The two jacks are identical moldings, but they should be mirrored (they both faced forward). I sawed off the bottom of one and turned it around, using a styrene disc to replace the sawed-off plastic.

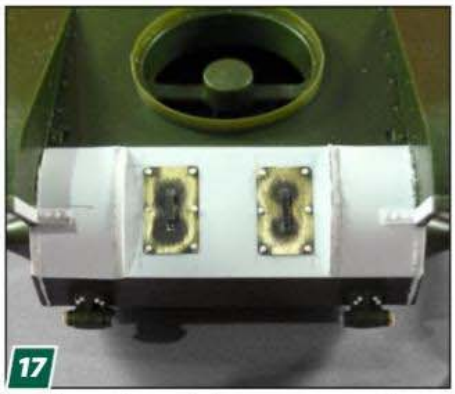


Guard rails by the rear turrets were not in the kit. I made the smaller ones with .030-inch styrene rod glued into .125-inch brass tubing; the larger ones are made from styrene rod and sheet.



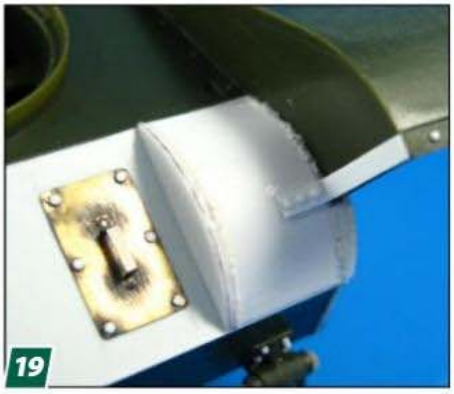
To repair the air-cleaner covers' sink holes, I filled them, sanded the entire part smooth and replaced the sanded-off bolts with salami-cut .020-inch styrene rod. I also added PE hinges and mesh.

I cut out the molded plastic fan-cover louvers and smoothed the piece to receive PE slats. After unsuccessful tries at eyeballing these, I glued two styrene ledges for mounts inside the cover and installed each slat, carefully adjusting its position and angle.

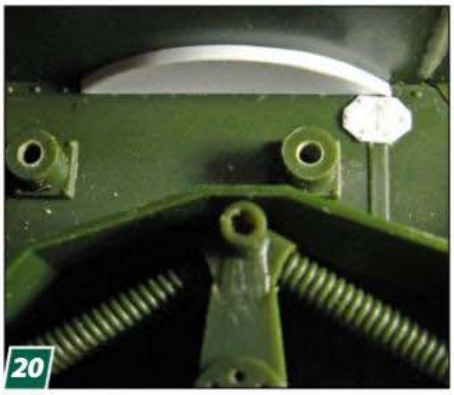


I made new transmission covers, re-creating the bulges with .010- and .020-inch styrene sheet: First I cut a large plate to size and covered the rear upper panel with a slight overhang; then I cut semicircles for the covers.

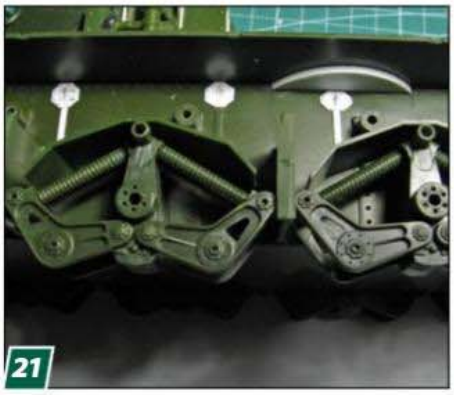
Another sheet-styrene semicircle closed the assembly on each side.



I added weld beads where appropriate. Interior parts of the fender brackets were missing from the model; I made them with .020-inch styrene strip, and gave these and PE access plates styrene bolts.



The 45mm turret cylinders extend slightly outside the hull; I showed this with styrene semicircles and strips.

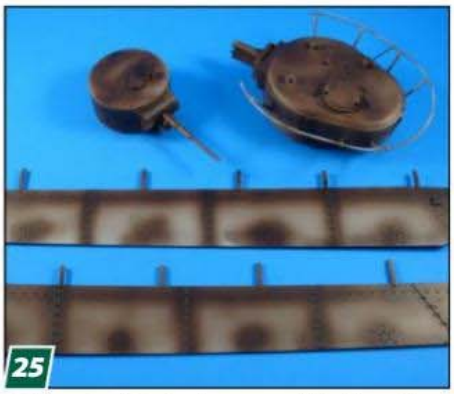


I also detailed the hull with missing vertical compartment partition lines and connection plates at the top of each partition line. These plates were given rivet detail by impressing them from behind with a drill bit.

The two large skirts had a row of ejection-pin marks inside. I filled these with putty, though I doubted they would be visible after the skirts were attached.

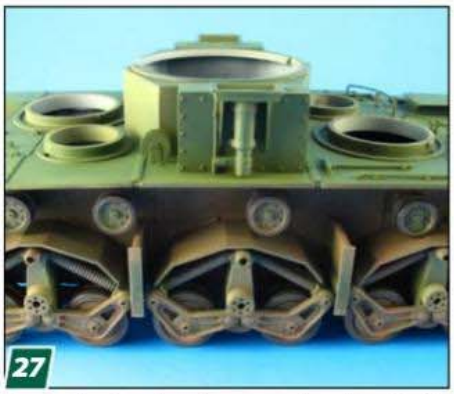
I wanted both new and spent 76.2mm rounds on the deck; I used kit parts, sawing and hollowing some to show spent casings.

Painting began with tracks and much of the running gear kept off the model. I primed with Mr. Surfacer 1000 from a spray can.



A thin mix of Tamiya brown and black acrylics pre-shaded panel lines and molded details.

A base-color mix of Tamiya flat green (XF-5) and flat earth (XF-52) was applied in four or five light coats, allowing pre-shading to show through (especially on the lower hull).



Road wheels and springs were hand-brushed dark gray, and the springs got a black wash and light gray dry-brushing. Light coats of flat earth and pigments showed dirt and dust down low.

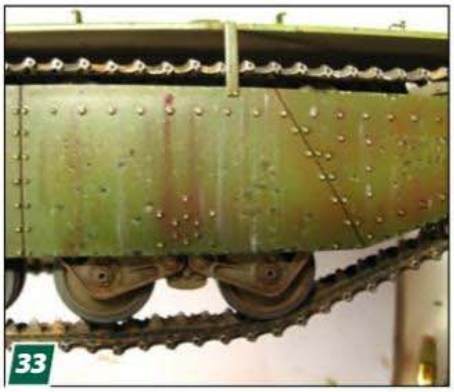
I attached the skirts, stuffed tissue into openings to mask the suspension, and resumed painting topside. To post-shade, I mixed four bottles of increasingly lighter shades of the base color using yellow and white. I lightly airbrushed these over horizontal surfaces to depict sun-fading, moving closer to the centers of panels with each shade while avoiding vertical surfaces.

A filter coat adds interest to a single-color scheme. I mixed Tamiya flat red (XF-7) and flat yellow (XF-3), thinned it about 85%, and lightly airbrushed various panels. Go easy with this — it is a subtle effect.

Chipping begins with light green for scuffs…

… followed by dark gray and metallics for deeper gouges and scratches. I stuck to edges, hatch covers, and traffic areas, and followed with another filter coat. A thin layer of Pledge FloorCare Multi-Surface Finish protected the paint and helped dark brown pinwashes flow uniformly into recesses to deepen details.

After the pinwashes dried, two coats of clear flat restored the proper sheen. Then I applied dot filters, wetting the surface with turpentine, applying dots of red, green, and white artist's oils …



… and, using a flat brush damp with thinner, pulling the paint down to produce various weathering effects.

Skirts were lightly sprayed with flat earth, and dark pigment applied to the lowest areas. Then I dry-brushed raised rivets and bolts with lighter shades of the base, except for random touches of dark steel for chipped paint.

A random sprinkling of oregano and a rolled-up tool pouch made from two-part epoxy putty provided a couple of finishing touches. **FSM**

Meet Robert Shveytser

Robert, a massage therapist living in Fair Lawn, N.J., moved to the U.S. from Ukraine when he was 10. He says, "My dad did some traveling for his work and would bring back model kits for me, mostly planes. These fired my imagination and love of putting together kits." Being fluent in Russian has helped his model research, along with an education that included drafting and art classes, "very useful in working with colors as well as designing parts that I need to scratch-build. I also enjoy reading about tanks and will watch just about any movie if a tank is featured in it." His other hobbies include coin-collecting, watercolors, photography, and guitar.

By Elizabeth Nash

1

2

3

4

Tracks from window screens

Broken or misplaced 1/72 scale tank tracks? Me too! I was missing track for a German SdKfz half-track armored fighting vehicle and decided to construct my own.

First, I made a track template from cardboard and used it to cut some metal window screening, ***1***. I then cleaned the screen with isopropyl alcohol before priming it with black paint.

Starting at the top of wheel section, I super glued down the track, using a pair of tweezers to mold it to the wheels in a realistic way. I overlapped the ends slightly, ***2***.

Once the glue was dry, I made a mixture of plaster of paris, tacky glue, and brown acrylic paint. Once the consistency was like mud, I took a brush and stick and began to apply the brown mixture. I thickly coated the under carriage, tracks, and wheels, ***3***.

Once it had set, I came back with a dark brown wash and touched up the muddy areas. You don't want to rush putting on the mud — make sure it is dry before doing touch-ups or adding washes.

I added decals and figures to the AFV, then finished it with a few washes and a bit of dry-brushing, ***4***.

– Robert Bailey
Fort Collins, Colo.

Inexpensive designs

I recently found a neat template at one of the big craft stores. It is actually an eraser guide, but I found it works great for putting lines on roadways with a colored marker.

It has several different patterns on it, and I am sure it will work for other markings as well.

The best part is that it is very inexpensive (around $2), and made from thin metal that can be easily cleaned with any solvent.

– Manny Kaneblei
York, Pa.

Good for a caffeine and cleaning fix

Cleaning your airbrush can be messy if you just pour solvent over the dismantled parts and try to clean them with rags; and you run the risk of losing the tiniest parts this way. For years I have been using a French press coffee maker to safely submerge small airbrush parts in lacquer thinner.

Be sure to get a glass container so you can see inside, and one with a press screen made of stainless steel, not plastic. A good quality French press can be had for around $10.

First, remove the press screen and fill the bottom of the container with 2-3 inches of solvent. Then insert the press screen back into the container, but only about halfway down. While keeping the top lid open, drop your airbrush parts into the container — the press screen will catch them. Lower the screen into the solvent and let the parts sit for a few minutes while swirling them around every so often.

To remove the parts, lift the press screen straight up and out of the container. The excess solvent will drain back into the container as you do this. Be careful to not let any parts fall off the screen back into the container. While holding the press screen over a paper towel or rag, carefully tip it sideways to deposit the parts. Then complete the cleaning and drying of your airbrush parts.

– Robert House
Rio Rancho, N.M.

HAVE A TIP OR TECHNIQUE TO SHARE?

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MARS, the first of Trumpeter's M270s

Capable of firing salvos of 12 rockets, the M270 Multiple Launch Rocket System entered U.S. service in the early 1980s. Using shoot-and scoot tactics, the vehicle can relocate before the enemy can plot counter-battery fire.

Several NATO nations acquired and eventually built the M270 under license. Trumpeter's first M270 represents the German version known as the Mittlere Artillerie Raketen System (MARS).

Molded in light gray plastic, the kit features a detailed cab and rocket pod, although much of the latter can't be seen on the finished model. Besides windows, the clear sprue holds lights and rearview mirrors. A small photo-etch (PE) fret provides screens for the engine compartment, and small parts for the cab and rocket pod. All those details, and individual-link tracks with separate guide horns, pushes the parts count north of 800. A small decal sheet and color diagrams show markings for two vehicles.

The instruction's clear diagrams only left me scratching my head in a couple of places.

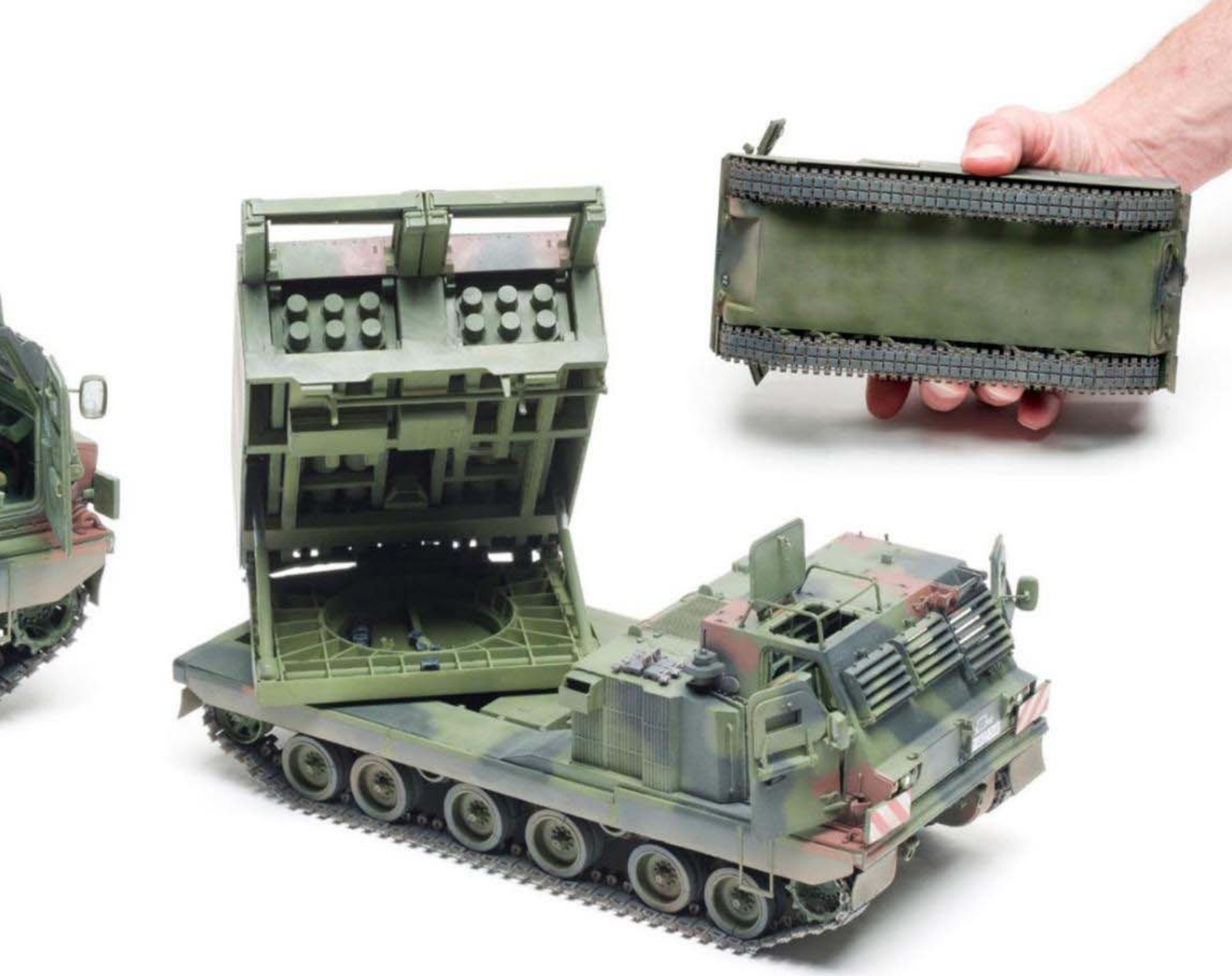
The wheels feature separate tires, but be sure to paint the rim molded on the front the main body color. Although the suspension arms are keyed for alignment, there is some play in the mounts. Use a straight-edge along the axles to keep them aligned while the glue dries. Diverging from the instructions, I left off the running gear and tracks until after painting. However, if I were to build another, I would follow the directions; it would have been a lot easier to install the tracks without the weight and watching out for all the fragile details.

Details fill the cab, including driver controls, fire-control panel, radios, and even ventilation hoses. Callouts reference colors by name and GSI Creos paint numbers. Decals provide placards and controls to give the cab an even busier appearance. With aid from Microscale Micro Sol and a hair dryer, the dashboard decal settled into the panel's molded detail with just a little distortion. The one-piece decal for the fire-control box didn't fit, so I cut it into several pieces.

In Step 13, the placement of placards was vague. But a quick look at interior shots at www.primeportal.net/artillery/m270_mlrs.html brought clarity. Unfortunately the decals seemed a little big, so I artistically repositioned them for fit.

Also unclear was the position of the PE screen wrapping the oval vent (Part L4) on the engine compartment. I put it around the fine lip, but it was a little short — I covered the gap with thin sheet styrene.

If you build the rocket box fully loaded, don't spend much time cleaning up the interior parts — because they won't be seen. When adding the loading beams in Step 27, test-fit the cover (Part E). That will



allow adjustments for fit. It doesn't hurt to test-fit the load-rail covers (parts D31) at this time — I didn't and had to trim them a bit.

Make sure you get the end plates for the rocket boxes correct. They aren't keyed and I put one on upside down — the solid beam should be at the top.

I painted the vehicle with Tamiya NATO green, brown, and black, then added the decals over clear gloss; they responded well to Micro Sol. After applying a flat black wash, I sealed the markings with Tamiya clear flat.

Finally, I added the tracks, starting with the tedious process of cleaning each link and adding the guide teeth. I had problems aligning the teeth, so I made a small jig to build about 10 links at a time.

The links click together, but the connections lack strength and several separated during installation. My solution was to make two sets of tracks for each side, one for the upper run, the other for the bottom. (The instructions call for 87 links per side, but I used 85 instead for a taut set of tracks.) Then, I ran Weld-On 3 down the center of each run with a Touch-N-Flow applicator. After 20 minutes, the glue held the tracks but the runs were flexible enough to bend around the drive sprockets and idlers. Once everything was aligned, I glued the tracks to the running gear.

While installing the tracks I heard a strange snapping noise, which turned out to be all but two of the outer tires cracking from stress. I didn't use glue for the tires and the fit was snug, so perhaps gluing them might prevent the cracking.

I spent 47 hours building my M270. While the kit presented some challenges the finished model looks great. I think any armor modeler with some PE experience and without a fear of individual-link tracks could handle this kit.

– John Plzak

Kit: No. 01046
Scale: 1/35
Mfg.: Trumpeter, www.trumpeter-china.com
Price: $139.95
Comments: Injection-molded, 828 parts (28 PE, 2 metal tubes), decals
Pros: Detailed cab; clear parts for all lights and mirrors; extensive decals for cab displays and placards
Cons: Fiddly individual-link tracks; tires cracked after installation

Academy F-15E Strike Eagle

The latest in Academy's line of 1/72 scale press-fit aircraft kits is the ground-attack version of the vaunted Eagle — the F-15E. Unlike previous kits with this technology, this one is labeled "Modelers Edition" on the box, not "MCP" (MultiColored Plastic), and it doesn't include optional sticker markings.

The Strike Eagle is molded in dark gray plastic, very close to the gunship gray found on the actual aircraft. The canopy, HUD glass, and Sniper pod lens are molded clear. This release comes with outstanding Cartograf decals for three aircraft from the 4th Fighter Wing.

The parts show excellent subtle recessed panel lines and rivets.

Features include full-length intake trunks, a well-detailed cockpit, separate speed brake, a pair of drop tanks, two each AIM-9X Sidewinders and AIM-120 AMRAAM missiles, and 14 GBU-38/B 500-pound JDAMs. An AN/AAQ-33 Sniper pod is provided in addition to the AN/AAQ-13 and AN/AAQ-14 LANTIRN pods that are used for laser-weapon guidance. Unused GE F-110 engine parts indicate a forthcoming kit will include Saudi and Singaporean Strike Eagles.

Brilliant engineering and excellent fits highlight the kit. The instructions don't mention it, but it's clear that this kit is designed to be assembled without cement. Slightly tapered pins fit tightly into holes, and, once you've pressed the assemblies together, most seams disappear.

The upper fuselage half is molded with the wings, and the bottom fuselage half with the conformal fuel tanks. The forward fuselage is molded in left and right halves, trapping the cockpit and nose-gear well; then the forward fuselage is trapped by the main fuselage assembly. The sections of the rear fuselage around the engines are molded separately, so they can be painted natural metal before adding them to the main assembly.

That design and the monochromatic camouflage make for a quick build. I painted the aft fuselage, afterburners, landing gear and bays, cockpit, weapons, and canopy frames. The rest of the gunship-gray plastic received a coat of Pledge FloorCare Multi-Surface Finish in preparation for decals.

I assembled everything after painting, and it took just a couple of hours to press it all together. I used liquid cement to close seams along the booms for the tails.

The only downsides to the press-fit engineering are the single-piece canopy with no mechanism to pose it open, and the rather solid-looking representation of the exposed afterburner push rods and the landing gear's oleo scissors.

The instructions are clear, and the assembly sequence should be followed carefully. Beware of a couple of numbering slip-ups: The parts diagrams of sprues A and B lack part numbers, and the decal diagrams misidentify the wing badge on the right side of the fuselage as No. 3 — it is No. 2 on the decal sheet. Also, stencil s6 on the left side of the nose is shown but not labeled.

The decal markings were perfectly printed and went on with no problems. But there are well over 100 individual stencils scattered over the airframe, pylons, and weapons. Decaling took about eight hours — twice what I spent painting and assembling the model! I applied a coat of Testors Acryl clear flat after the decals dried.

Final assembly involved pressing the bomb pylons to the conformal fuel tanks and then the bombs to the pylons. Once the weapons are pressed tightly into place, you can't see any of the pins or the holes. The canopy fits tightly over the cockpit. I closed the speed brake, but it can be posed open.

The small compromises of Academy's Strike Eagle are overshadowed by the overall appearance and ease of assembly. A model that looks this good in less than 20 hours? I'll take it!

– Paul Boyer

Kit: No. 12550 **Scale:** 1/72
Mfg.: Academy, www.academy.co.kr
Price: $37 **Comments:** Injection-molded, 143 parts, decals **Pros:** Excellent surface detail; fine cockpit; great fits even without glue; good ordnance; easy to build
Cons: Simplified afterburner detail; solid landing gear oleo scissors; non-posable canopy

Trumpeter MiG-31B/BM "Foxhound"

Designed to replace the MiG-25, the MiG-31 supersonic interceptor can reach speeds of more than 1,800 mph. Further developments in avionics and weapons are found in the B and multirole BM versions.

Trumpeter's beautiful new-tool Foxhound comes in a large box packed to the brim with 16 gray plastic sprues; the parts feature fine recessed and raised surface detail and no flash. The crystal-clear canopies are bagged separately and protectively wrapped in foam. Stores include drop tanks and R-33, R-40T, R-40R, R-77, and R-73E missiles.

Two decal sheets provide markings for two aircraft with a choice of numbers; stencils for the airframe and weapons are included.

The ejection seats feature molded harnesses, but the soft details are difficult to paint. On the other hand, side consoles and instrument panels have crisply molded dials and controls that can be enhanced with decals. Three different instrument panels are provided for both the front and rear positions, but the instructions are vague about which one to use for which version.

The canopies are a little too big and will need work to pose them closed.

The landing gear and bays are extremely detailed straight from the box. All of the gear legs fit perfectly, but the main gear is complex and a bit fiddly; study the instructions carefully and you should have no problems.

The kit provides full intake trunks comprising four parts each, with another four parts for each intake ramp. Rather than follow the instructions, I attached the ramps after the fuselage was assembled to ensure proper alignment.

I had trouble mating the fuselage with the wing assembly because the lower fuselage was slightly warped. I pushed the sides into place with a stick inserted though the rear opening for the exhausts, then clamped the fuselage once everything clicked into place. A little filler smoothed seams.

Adding gear doors, air brakes, pitot tubes, scoops, and antennas finished the fuselage. The kit omitted the large antenna on the spine aft of the cockpit, so I made one from sheet styrene.

Be prepared to spend a couple of sessions applying the stencil decals — there are a ton of them. Unfortunately, the printing isn't super crisp, and most of the stencils aren't much more than a string of black dots. So you'll have to decide if they're worth the effort. The decals perform flawlessly, however, settling with aid from Microscale Micro Sol.

The finished model's shape and dimensions look accurate, detail is excellent, and fit overall is quite good. With more than 320 parts, this kit is probably best recommended to modelers with some experience. But the reward is an impressive replica of Russia's front-line interceptor.

– Mike Klessig

Kit: No. 01680 **Scale:** 1/72
Mfg.: Trumpeter. www.trumpeter-china.com **Price:** $69.95 **Comments:** Injection-molded, 323 parts, decals **Pros:** Excellent surface detail; complete intake trunking; detailed cockpit, landing gear, and bays **Cons:** Some overly complicated parts, such as the landing gear; wing-to-fuselage join difficult to align

Rye Field M1 Assault Breacher Vehicle

An obstacle-clearing machine, the M1 Assault Breacher Vehicle (ABV) has served with the U.S. Army and Marines since 2009. If something is in the way, such as mines, the ABV will clear a path with a bang using its mine plow or M58 Mine Clearing Line Charge (MICLIC).

The plastic parts in Rye Field's M1 are flash-free and crisply molded. A small photo-etched fret is included, and a tiny Cartograf decal sheet provides markings for three vehicles. The 28-page instruction book comprises 23 steps, a parts-tree breakdown, and references for Ammo of Mig Jimenez colors. I found one error in the instructions: Part 34 should be Part 43. The directions are clear except for assembly of the mine plow in steps 17-21, which are busy and difficult to follow.

While assembling the turret, you must decide whether to pose the MICLIC in launch position or stowed. I opted for launch position to show off the detail; the coiled C4 charges appear to be a touch small in scale compared the photos, but still look convincing. The turret lacks the nonskid texture molded on the hull, and no interior is provided, so I glued the separate hatch closed. I left the radio and Duke ECM antennas off until after painting to avoid breakage.

Like Rye Field's Abrams kits, the hull and suspension went together easily. The suspension includes torsion bars that can be omitted because the road-wheel arms are glued into position. In Step 13, the Lane Marker System (LMS) is posable.

The link-and-length tracks differ from the individual-link assemblies in the previous Rye Field Abrams. Constructing tracks around the road wheels was a bit tricky; the key was giving the glue time to dry. The mine plow proved to be the most complicated part of the build. Pay attention to the instructions to ensure parts go in the correct place. The color CAD illustrations provided were a big help.

ICM Polikarpov I-16 Type 24

Molded in light gray plastic, ICM's I-16 Type 24 features excellent surface detail with fine recessed panel lines and subtle ribbing on fabric-covered areas. All of the control surfaces are separate and have thin trailing edges; the rudder and elevators are movable, but the ailerons require modification for offset poses.

The comprehensive detail extends to the cockpit, but much of it is difficult to see through the tiny opening.

Clear plastic provides the windscreen, gunsight, and wingtip lights.

The decal sheet gives markings for four I-16s: three in standard dark green and blue camouflage, the other overall silver.

Despite the plane's diminutive size, the instructions comprise 47 steps. But each adds only a few parts. Detail painting callouts are included throughout the instructions, referencing Tamiya and Revell paints.

Aided by good fits, construction proceeded quickly. I found the instrument panel disappointing: It includes a gray plastic panel (B29) with a clear insert (D1) for the dials, but there's no provision for instrument faces, either with decals or molded detail. Admittedly, the panel is difficult to see. I painted the gray part and the back of the clear part flat black.

Minor sanding cleaned up the fuselage seam, but the wing roots showed deep grooves — not gaps, but a wide depression as if the part edges weren't square. I filled them with stretched sprue and scraped them smooth with a No. 10 blade. A coat of Mr. Surfacer 500 and light sanding eliminated the seams.

Like the cockpit, the detailed engine largely disappears once the cowl is buttoned up. I had difficulty attaching the nine exhaust pipes, because the pegs designed to align them are not precise. After drilling the ends for realism, I added the pipes one at a time, ensuring each lined up with its port and the glue was dry before attaching the next. It would probably be easier to cut the pipe short and glue them to the inside of the fuselage panels. The multipart cowl fit perfectly.

I painted my I-16 using the recommended Tamiya colors and applied the decals over a coat of Vallejo clear gloss. The markings responded well to Microscale's decal solutions.

After flowing a black enamel wash into the panel lines, I added the windscreen, guns, pitot, prop, and landing gear. The last is delicate but sturdy once in place.

I spent 19 hours on my I-16; the model matches published dimensions.

Fit and surface detail is top-notch, and any builder with a modicum of experience will have no problems.

– John Plzak

Kit: No. 48097
Scale: 1/48 **Mfg.:** ICM, www.icm.com.ua **Price:** $30.99
Comments: Injection-molded, 92 parts, decals **Pros:** Separate control surfaces; good interior; wide selection of markings **Cons:** Panel lacks instruments; imprecise locations for the exhaust pipes

Kit: No. RM-5011 **Scale:** 1/35
Mfg.: Rye Field Models, www.ryefield-model.com **Price:** $82
Comments: Injection-molded, 1,083 parts (47 PE), decals **Pros:** Excellent plow and LMS details; MICLIC can be positioned in launch position or stowed **Cons:** Nonskid texture missing on turret; plow assembly difficult to follow

The few decals went on nicely over Testors Model Master Army/Marine Corps armor sand (No. 2136) camouflage. Washes and pastels highlighted details.

I spent 95 hours building Rye Field's ABV, about what I expected given the number of parts.

Good references are essential; photos in *M1 ABV Assault Breacher Vehicle* by Chris Mrosko and Brett Avants (Sabot, ISBN 978-0-9973774-6-0) helped in assembling the plow.

I would have liked some interior details and nonskid coating on the turret, but neither is a deal breaker. Rye Field's ABV is an excellent kit and should appeal to any fan of modern armor.

– Chris Oglesby

Hasegawa *Mikasa*

Japan's *Mikasa* is the only pre-dreadnaught ship still in existence. Built by Vickers between 1899-1902 as a modified *Formidable*-class battleship of the Royal Navy with two additional 6-inch guns, the ship served during the Russo-Japanese War and is now a museum in Yokosuka, Japan.

Hasegawa offers a couple of versions of its 1/700 scale *Mikasa*, including a waterline model and this Limited Edition full-hull kit with photo-etched (PE) parts, metal gun barrels, and a wooden stand. Optional ventilators, yardarms, and armament allow the ship to be finished as the Japanese flagship at either the Battle of the Yellow Sea or the Battle of Tsushima.

Including the PE and metal details, there are more than 350 parts in the kit — all for a ship that is 7 inches long and a little more than an inch wide.

The crisp, clean parts show no flash or mold seams. Clear instructions, a highlight of the kit, show part placement and PE bends.

In Step 1, glue the three internal braces (parts D1-D3) for the upper hull to one half, rather than both as shown. This provides play in the upper hull when attaching the lower hull. I followed the instructions and had to shave the inner section of the hull to correct the fit. Step 1 also shows an option to drill holes for davits on the quarterdeck for the 1902 version.

Addition of PE parts, shown in separate instructions, begins with Step 4; pay careful attention to both sheets.

Take care attaching the central citadel structure to the deck. Mine had a slight curve, and clamping it to the deck caused the bow to rise. I loosened it with liquid glue to correct the hull's shape, leaving a fine gap at the front of the structure.

The rest of the build was trouble-free, if fiddly given the amount of PE involved. I spent about 25 hours on basic construction and painting, but adding all of the PE took about 50 more hours; much of the extra time was spent trimming, bending, and attaching — as well as fixes for accidents. I appreciated the excellent PE railings with attachment points on the top and side sections, leaving the gluing surfaces smooth. Vulnerable catwalks for the torpedo netting and the captain's walk fit nicely and proved to be sturdy during construction. I bent most gangway ladders to shape while still on the fret, leaving one side attached.

I painted with acrylics throughout: Testors Model Master Yokosuka Naval Arsenal gray (No. 4253), wood (No. 4673), and oxide red (No. 4882), and a little Tamiya linoleum (XF-79).

Kit: No. 43170 **Scale:** 1/700
Mfg.: Hasegawa, www.hasegawa.co.jp
Price: $79.99 **Comments:** Injection-molded, 353 parts (121 PE), decals, paper flags **Pros:** Good fits; fine detail; terrific photo-etched metal **Cons:** Small model makes fitting all parts difficult

The only thing missing is a rigging diagram, but that information is available from many sources.

This is a kit for intermediate-to-experienced modelers with keen eyesight, infinite patience, and extremely fine tweezers.

– Mark Karolus

Wingnut Wings Sopwith F.1 Camel

Despite being the mount of many Allied aces and a cartoon dog, World War I's Sopwith Camel has not been well served in 1/32 scale. The only kits until now have been based on Hobbycraft tools, the newest of which is at least 12 years old. Wingnut Wings ends that drought in style with the release of an all-new Camel, in not one but six kits, including a "Duellist" pairing with its out-of-production LVG C.VI.

Each kit includes all the optional parts for the entire series, with differences accounted for by varying engine sprues included in the different kits. This review covers Clerget-powered variants with 130 horsepower and 140 horsepower versions, depending on optional parts.

Wingnut Wing's typical attention to detail and clever design show up everywhere. Modelers with limited biplane experience will be thrilled that the center-section cabane struts are molded in place and at the proper angle — that makes mounting the top wing a snap.

The fully appointed cockpit includes photo-etched seat belts to decorate the nicely molded wicker seat. A handful of ejector-pin marks marred the cockpit area inside the fuselage halves, but a touch of filler and sanding made them disappear.

The twin Vickers machine guns are smartly split into breech and barrel sections, helpful when installing the characteristic hump covering. That hump molding is astonishing — it is so thin it almost looks like resin. I left it off for painting so I could also install the gun barrels at the end of the build.

As usual for Wingnut kits, fit throughout was stellar. The interior takes time to finish because of the wide variety of colors and details, but that's typical for WWI models.

The fuselage fits together like a precision instrument, including the deck over the cockpit.

Before installing the struts and other wood parts, I painted them with Tamiya deck tan (XF-55) then streaked brown artist's oils to simulate grain. The engine and prop were finished separately. The prop alone accounted for six paint applications; I used an RB Productions prop tool to produce the laminated layers.

I added the lower wings but left off the fragile stabilizer and rudder for painting. This meant I left the rear fuselage unglued, which allowed me to mount the petite tail skid near the end of the build.

I painted the underside and the wooden upper decking Tamiya deck tan. Then I masked all of the ribs on the wings, and stringers on the fuselage, and misted on Tamiya desert yellow followed by a splotchy coat of lightened deck tan. Removing the masks revealed subtly highlighted structural elements. I mixed Tamiya dark green and olive drab to match the upper camouflage PC-10 green; masking and lighter shades reproduced the rib effects topside. The cowl received a coat of Tamiya NATO black.

The decals settled over clear gloss with heat from a hair dryer. The white on the cowl stripes is opaque, and they fit well.

I dropped the top wing into place — effortless thanks to the pre-angled cabane struts — and the outboard interplane struts clicked right into place.

I rigged the plane with EZ-Line, a stretchy nylon material. The tricky step was installing the little football-shaped tensioner in the center section of the rigging just above the guns. I drilled a *tiny* hole through the *tiny* part, then threaded two pieces of EZ-Line through and tacked them in place. Extrapolating measurements from the instructions, I calculated the length of line from the football to the wing top was 24mm. After cutting each to 22mm to accommodate tension, I attached the assembly. Like magic, the little part ended up exactly in the center. My teachers were right — math works!

After little more than 34 hours, I was over the hump and had a good-looking Camel in my stable. Except for some tricky rigging, this would be a good kit for those wanting to try their hand at WWI biplanes. The engineering brings it within reach of modelers who have a bit of experience and want to stretch their skills.

– Chuck Davis

Kit: No. 32074
Scale: 1/32 **Mfg.:** Wingnut Wings, www.wingnutwings.com **Price:** $79
Comments: Injection-molded, 115 parts (10 PE), decals **Pros:** Engineered for ease of assembly; good markings selection; a ton of detail **Cons:** Stripe decals not split to fit cowl ring

Airfix Junkers Ju 87B

One of the most famous and easily recognizable aircraft of World War II, the Stuka needs no introduction. The Luftwaffe dive-bomber has a long history with Airfix, which released its first 1/72 scale Ju 87 in 1957. This new-tool kit replaces a 1/48 scale offering first released in 1981.

It has all the features that make Airfix's new kits so great good fits, crisp details, and interesting building options, while keeping the parts count at a relatively low 158. All of that makes Airfix's Stuka ideal for a quick build or a novice modeler.

As with most aircraft, construction begins in the cockpit. But there's a twist: The entire assembly, including floor, seats, controls, bulkheads and walls, goes into the sturdy wing spar and onto the center lower wing. Then, the assembled fuselage slides over it.

The seats lack belts, and no crew is included, so the omission is obvious under the big canopy. I printed belts on paper, cut them out, and glued them to the seats. The aftermarket will undoubtedly produce suitable plastic or photo-etched belts soon.

The rest of the airframe went together with little effort. The upper portion of each wing is a single piece, and they fit perfectly — joins just seemed to disappear with minimal cleanup. I used no filler on the model.

The elevators can be posed up, down, or neutral, with optional tips.

The nose came next, and with it the option to display a pretty complete Jumo 211d V12 engine, including radiator, plumbing, and the mounts on the firewall. Or you can leave it out and build the cowl buttoned up. The instructions don't give a third option with one or more panels removed for maintenance, but it may be possible with modifications.

The canopy gave me a little trouble. For some reason, the clear-parts glue I usually use to attach canopies would not hold the kit parts. Instead, I used Tamiya Extra Thin Cement, which adhered perfectly but also crazed the clear plastic in a couple of spots.

I applied decals for a Luftwaffe bomber in Spring 1940; they laid down perfectly, but a few of them appear to be too big. No swastikas are provided.

I spent about 30 hours on Airfix's Stuka, much of it painting. If you are looking for a quick, straightforward build with few speed bumps, this is the kit for you. It's a great choice for a less-experienced modeler.

– Chris Cortez

Kit: No. A07114 **Scale:** 1/48
Mfg.: Airfix, www.airfix.com
Price: $34.99 **Comments:** Injection-molded, 158 parts, decals **Pros:** Quick build; construction options **Cons:** Some decals slightly too big; clear parts resisted clear part cement

By Mark Hembree

What's up with "stencils"?

Q I am confused by references in articles to "decals" and "stencils." Are they the same thing? Sometimes the terms seem to be used interchangeably, and other times as distinctly different things, sometimes even in the same sentence! Thanks for clarifying.
– Ed Maheigan
Plymouth, Mass.

A Ed, you raise a valid point — sometimes, in the push to fit all we can into a story, we may rush through those references to stencils.

The answer to your question is "yes, sometimes."

Usually, when we write about stencils we are referring to decals that depict various warnings such as "No Step," "Fuel Only," or "Danger! Propeller!" that are sprayed (through stencils) onto various parts of the aircraft. In the cockpit, these little decals may also be referred to as "placards" which are used in the real aircraft to label things you might not want to spray paint on (like the radio).

Sometimes, though, modelers will actually spray larger markings through stencils, just as on real aircraft — but that is a matter of painting, and so it usually gets separate mention.

Finally, to completely muddy the waters, there are dry transfers — these are rubbed off a sheet and onto a model surface.

I hope that sheds some light on the matter. Thanks for writing, and for your question — it is nice to know people are reading carefully!

Brush-painting problems

Q I've been using Vallejo Model Color acrylic paints, usually with good results, but sometimes after I brush them on they turn milky. I try to use filtered water as much as I can but I still occasionally get this cloudy appearance.

Also, if I let a model sit overnight and try to touch it up the next day, the new coat dries a lighter color than the first.

Do I need to use Vallejo's Model Color thinner or airbrush thinner?
– John Foster
Hutchinson, Kan.

A Sorry to hear of your difficulties, John. I'm not sure I have all the answers for you. There are so many variables when it comes to how paint performs.

Vallejo is my favorite paint for hand-brushing, so you are doing that right as far as I am concerned. I have not encountered the cloudiness you mentioned. Possible causes may include:

- Residue in the brush: Soap and water (or just water) is the best way to clean Vallejo out of a brush. Use dish detergent or shampoo.
- Agitation: Always shake well. Add a little thinner if the paint bottle is less than half full.
- Humidity: Paint does not behave well when it's muggy outside.
- Age: Old paint can be unpredictable.

Regarding different color tones with touch-ups, this is not unusual. Keep touch-ups small or paint the whole area to avoid differences in tone. Also, remember that applying two light coats is better than one heavy coat.

You can use thinner, but no need to bother with airbrush thinner for brush painting. Just don't use alcohol — that makes a gummy mess of Vallejo paints. As with all brands of paint, using the same brand of thinner is always best — that's what it's made for. **FSM**

Hairspray in Afghanistan?

Q I am in a bind here. I want to use the hairspray technique. However, I was not deployed with an airbrush. I have only Tamiya spray cans, and I'm concerned the paint will be too hard for the technique to work. Any suggestions?
– David Finney
Kabul, Afghanistan

A I think the technique can still work, but you might have to do it differently from the way Karl Logan explained it in his November 2008 *FSM* article "Hairspray weathering."

The main difference is that Karl applied the corrosion undercoat, then hairspray, then acrylic paint that the hairspray allowed him to scrub off with a wet toothbrush to reveal the undercoat. Tamiya's acrylic lacquer (out of the spray can) will act differently, so your result may vary.

If hairspray doesn't work, you can achieve similar effects using something other than hairspray for the release layer — salt, for instance, or rubber cement. (People use liquid mask, too, but I'm going to guess the first two will be easier for you to find there.) The sequence remains the same: the weathering layer, the release agent where you want the rust or weathering, the top coat, and then removing the salt or mask to reveal the weathering layer. I would use enamel on the bottom layer to help avoid going through to the plastic.

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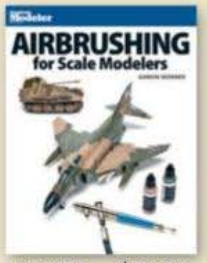

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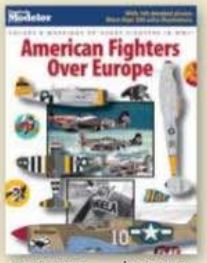

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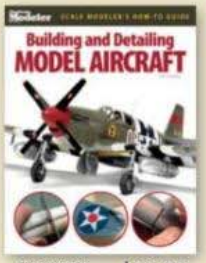

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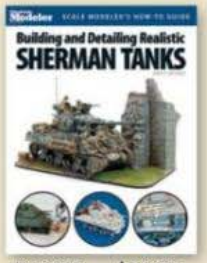

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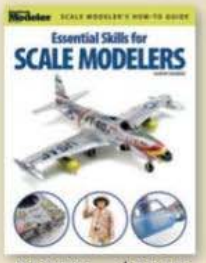

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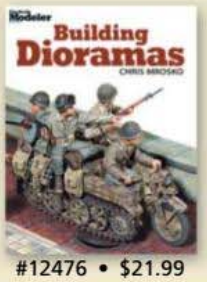

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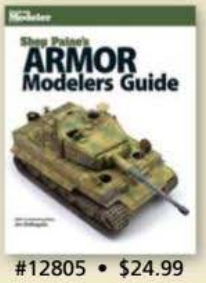

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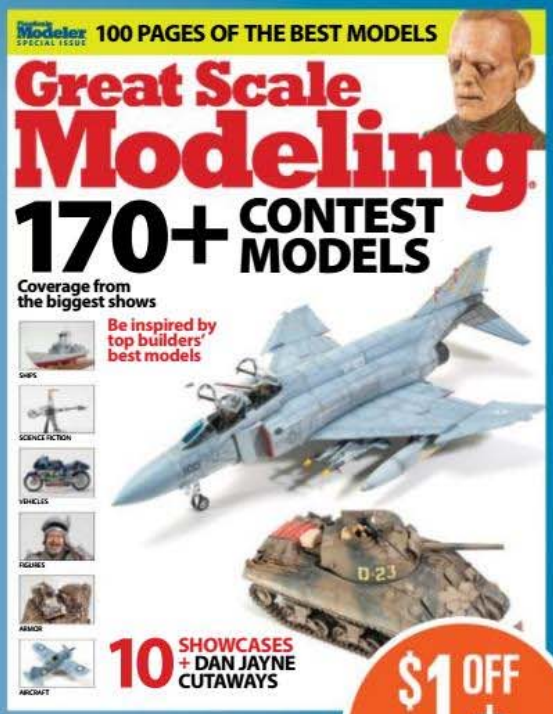

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IL, WHEATON: September 24th, 2017-70th ILLINOIS PLASTIC KIT & TOY SHOW, HOME EC & ANNEX BUILDINGS, 150 show tables available, BUY/SELL/TRADE/ or just browse, held at the DuPage County Fairgrounds, 2015 W. Manchester Road, Time: 9:00am-2:00pm. Adults $5.00, children under 12 years $2.00. INFORMATION: Past-Time Hobbies, Inc. 630-969-1847 or Email: pthpowerinc@aol.com

MN, INVER GROVE HEIGHTS: Nordic-Con Model Show and Contest with vendors, raffle and special interest awards. NEW LOCATION: Inver Grove Heights Community Center, 8055 Barbara Ave. East. September 30, 2017, 9:00am-4:00pm. Contact Bob Maderich @ 612-423-2985 or robertmaderich69@hotmail.com or for vendor info Erik Zabel @ zabelerik@hotmail.com or 612-275-4371 or our Website www.nordiccon.com

NH, MANCHESTER; IPMS Granite State presents Granitecon XXV: Falls Event Center 21 Front St. Manchester, NH. Sunday, October 15, 2017, 9AM - 4PM. General Admission $2. First 5 adults entries $5. Junior entries Free. For additional details, contact Rodney Currier, 603-726-3876. Visit www.granitestatemodelersclub.org

NY, POUGHKEEPSIE: HVHMG 2017, Celebrating 31 years, Elks Club Lodge, 29 Overocker Road, October 21, 2017. Sponsored by IPMS Mid-Hudson. Registration 9:00am-noon. More information at: www.hvhmg.org or contact John Gallagher at 845-462-4740 or ggallagherjoh@optonline.net

PA, CARLISLE: PENNCON 2017 Model Show and Contest. U.S. Army Heritage & Education Center, 950 Soldiers Dr. Saturday, September 16, 2017, 9:00am-4:30pm. Show theme: PROTOTYPES. 'Make & Take' for kids 15 and under. For more info go to: http://www.cenpennipms.com/ or contact Chet Mohn 717-774-4803, E-mail: Magus47@aol.com Vendors contact: Robin Crossley 717-439-4353, E-Mail: rlcttfn@aol.com

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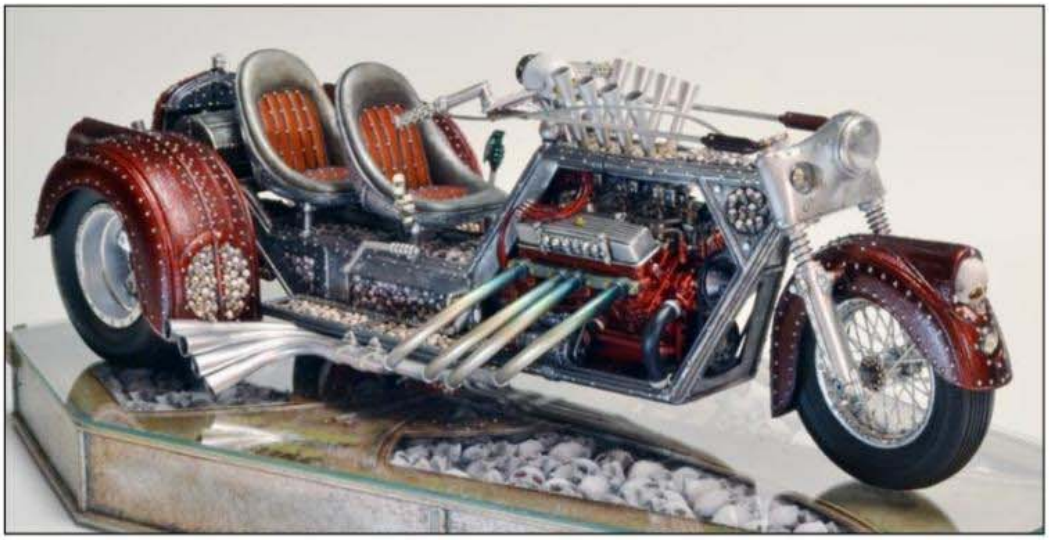
By Mark Hembree

Nobody beats *The Reaper*



In symbolic terms, the image of a skull is bad to the bone — whether it's the pirate's Jolly Roger or a tattoo on a biker's forearm.

Skull imagery also symbolizes themes of death and mortality, and as such it is wound into the lore of *Hallowe'en*, or All Hallows Eve, the day before All Saints Day — all celebrations of those of us who have gone before.

That is closer to what Alex "Wence" De Leon, of Carrizo Springs, Texas, had in mind when he began building "*The Reaper* V8 Trike" — a months-long tribute to his brother and lifetime hero, Leonard, 13 years his senior.

"It took seven months to build it and I was on a *mission*, a *mission* to build this," he says. "And the mission was to get over the grief that Leonard passed away. It was an homage to him."

Alex and five siblings grew up in Victoria, Texas, a town founded in 1824 by a great grandfather, Martín De León, on a plat adjacent to land owned by Stephen F. Austin (yes, *that* Austin).

It was a relatively quiet place in the 1960s, but Alex's brother shook it up a little. "He was an amateur stuntman," Alex says, "light on his feet. He was one of the first guys to ride a motorcycle around town, scrambling, stunts. Of course, I wanted to get on it, too, and he looked at me and said, 'No, not my little brother.'"

Instead, he showed Alex how to build models — Aurora armor, Monogram and Revell aircraft, and Renwal kits.

But eventually Alex did ride, "since 1978," he says. "There's the practical knowledge right there. Also, a friend of my brother's had a trike back in the 1970s. That thing was imprinted on my brain."

Alex's build is loosely based on Monogram's 1/8 scale Big T hot rod (circa 1962), which provided the engine, transmission, wheels, and seats. Everything else is scratchbuilt.

The frame was wrought with styrene tubing. "Once I got the cradle around the motor, I had to figure out the wheelbase and where the rear-wheel axle would be mounted," Alex says. "I scratchbuilt all that to the axle; the axle is a kit part, again detailed out. And I had to figure out where to put the shocks and suspension on the frame, how to drop the frame as close to ground level as possible.

"Once I got the rear end mounted, I had to go to the front and match where the front fork would be mounted to the frame and figure the rake and then, of course, the front end itself — the hydraulic suspension was all scratchbuilt with styrene tubing, and I had to figure out the height there to keep the frame level to the ground. After that, you have to figure where exactly to mount the motor, and your motor mounts in relation to the frame."

Details followed. "The gas tank is not really that big, so I put tanks under the chassis. They're there in case somebody wants to question it."

Fenders were formed from sheet styrene. And there were rivets — 1,200 of them. Alex knows that because he ordered 600 from Grandt Line, then had to order another 600.

Numerous shades of Alclad II metallic paints tricked out the trike. The fenders are candy apple red over Alclad II chrome, subtly stippled for various textures.

Other detail highlights include: frenched headlights and taillights with M.V. Products and other clear lenses; a headlight mount sculpted from A+B epoxy putty; telescoping styrene tubing for heavy-duty shocks; and "zoomie" pipes for the exhaust, styrene tubing thermoformed by jamming the heated plastic onto a die punch. Airbrushed Alclad II chrome and shades of blue, green, and yellow depict heat distortion. The engine is plumbed with armature wire and clear styrene mini-tubing painted with a wash of candy apple red.

Oh, and those skulls: The small ones are resin-cast copies from 28mm gaming pieces; the larger pates are resin copies of 1/35 scale pieces from Warriors. All together, Alex figures there are about 900 on the bike or in the base.

"I just super-loaded it with all that detail," he says. "I tried to make it look as practical as possible, as functional as possible, and at the same time to do enough to it to blow your mind."

The Reaper has certainly accomplished that in model contests, including best-of-show honors with the George Lee Judges' Grand Award at the 2014 IPMS/USA National Convention.

Alex's parting advice? "Be dedicated, do your research, and make it personal." **FSM**

More at www.FineScale.com

See and read more about *The Reaper* V8 Trike at FineScale.com/Online-Extras.

Out of This World Modeling

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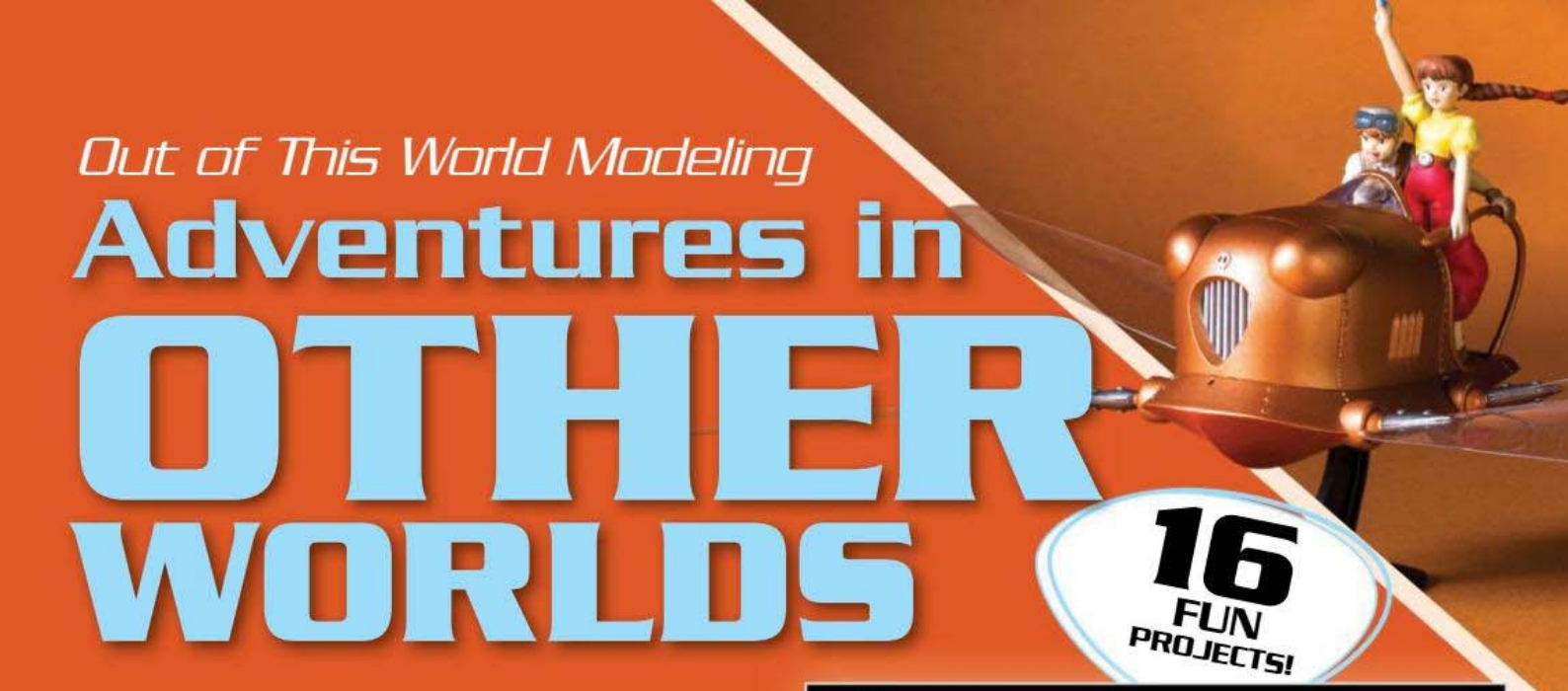

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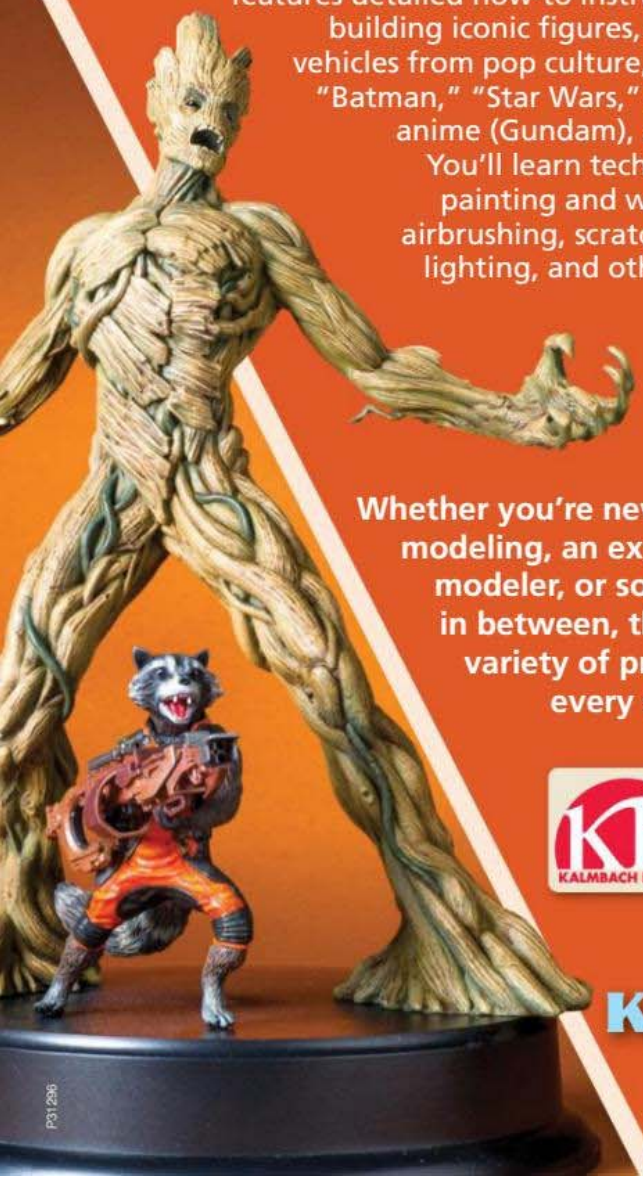
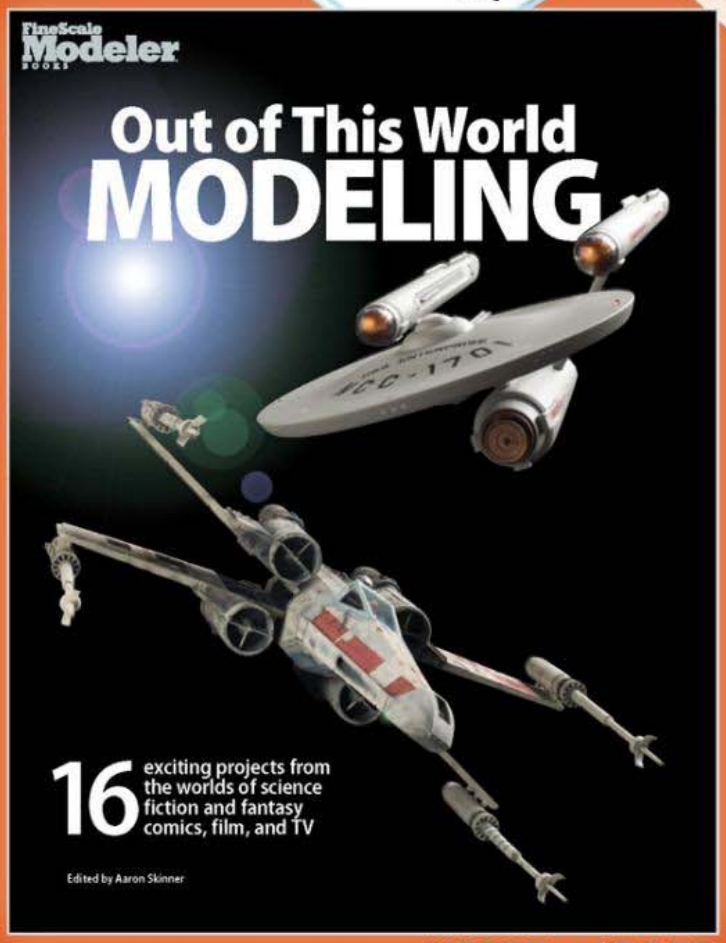


Whether you're new to scale modeling, an experienced modeler, or somewhere in between, there are a variety of projects for every skill level.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